

AMERICAN GAS ASSOCIATION

FEBRUARY
1960



Homard des gourmets, à la Chambord*



Four gas cooking enthusiasts — Owner Phil Rosen of Chambord, Hostess Julia Meade of "Playhouse 90", Managing Director Chet Stackpole of The American Gas Association and Chambord's maître d', Paris.

"Yes Indeed, Julia Meade...We Cook With Gas at Cafe Chambord," says Fernand Desbans, Chef du Cuisine. "I think of heat as an ingredient. It must be exact...precise...so, naturally, it must be Gas. You can ruin even the best food by improper temperatures—or make it even better with the *right* ones." **AMERICAN GAS ASSOCIATION**

*Lobster, as glorified at Chambord

FOR FINE CUISINE...  GAS IS GOOD BUSINESS

• This advertisement appeared in NEWSWEEK, December 28, 1959



Gas-fired elevator furnace for annealing conical steel shapes typifies industrial use of gas. Photo by courtesy of Selas Corp.

In our first issue as the new editor of the "A. G. A. Monthly," we feel we are fortunate in being able to present an unusually interesting array of feature stories. . . . The story on PAR Research plans for 1960, beginning on page 6, rounds up current and expected advances in thermo-electricity, the gas fuel cell, synthetic gas, new gas air conditioners and other areas promising an exciting and expanding future for the gas industry. . . . Research comes to bat again in this issue in the report on Illinois Natural's exhibit at a national science show, page 15. . . . The case for another kind of research, quite as important as technical studies, is presented by Daniel Parson, on page 17. . . . The glamorous side of gas gets full coverage in stories on the National Association of Home Builders' convention in January, and on gas appliances in movies and TV, pages 2 and 10, respectively. . . . The report by J. Edward Watts on the need for insurance to protect assisting companies during emergencies gave us an opportunity to combine a useful article with a dramatic picture story—see page 20. . . . New ideas for selling gas, to commercial and industrial as well as domestic customers, are presented in the stories on a Blue Star Home promotion (page 10), Gold Star promotions (page 29), industrial symposiums (page 27) and kitchen planning seminars (page 29).

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CONTENTS FOR FEBRUARY 1960

FEATURES

30,000 BUILDERS VIEW NAHB SHOW IN CHICAGO	2
BOLD RESEARCH PLANS ANNOUNCED FOR 1960	6
TOP HOLLYWOOD BILLING BUILDS GLAMOR FOR GAS	8
BLUE STAR SCORES FOR OKLAHOMA NATURAL	10
'SOARING '60'S' CONVENTION THEME	11
GAS APPLIANCE CENTER DEDICATED IN DALLAS	12
GAS RESEARCH STARS AT SCIENCE SHOW	15
MEASURING THE MARKET: RESEARCH FOR GAS SALES—by Daniel Parson	17
INSURANCE PLANS A MUST FOR RISKS OF MUTUAL AID—by J. Edward Watts	20

SECTIONS

ELECTRONICS SEMINAR STRESSES COMPUTERS (Accounting)	23
ARE NEW MAIN COST STUDIES RELIABLE?—by Daniel Parson (General Management)	25
SYMPOSIUMS SELL TO INDUSTRY—by Everett VK. Schutt (Industrial and Commercial)	27
KITCHEN PLANNING SEMINAR SHARPENS A NEW SALES TOOL (Industrial and Commercial)	28
IDEAS ADD GLITTER TO GOLD STAR (Residential)	29

DEPARTMENTS

INDUSTRIAL RELATIONS ROUNDTABLE	14
MEET YOUR ASSOCIATION STAFF (Chester L. Wegener)	16
FACTS AND FIGURES	19
INDUSTRY NEWS	35
A. G. A. ANNOUNCES NEW PUBLICATIONS FOR JANUARY	37
HIGHLIGHTS OF CASES BEFORE FPC	38
PERSONAL AND OTHERWISE	41
CONVENTION CALENDAR	43
PERSONNEL SERVICE	44

INDEXED BY APPLIED SCIENCE AND TECHNOLOGY INDEX

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Gas kitchen exhibits, Blue Star Homes, Home Service speaker featured at national home builders' convention

30,000 builders view NAHB show in Chicago

Approximately 30,000 builders from every state in the Union gathered in Chicago the week of January 17th to attend the National Association of Home Builders' 16th annual convention.

In his convention greetings, Carl T. Metnick, NAHB president, summed up the purpose and theme of the 1960 convention with these words:

"This great Convention-Exposition has been designed to assist the builder and his associates in their 1960 plans and operations. The convention theme has been aptly entitled, 'Patterns for Progress.'

"This is not merely a bright phrase. Neither is it an empty one. This Convention-Exposition is your door to new products, equipment and materials; to new construction and merchandising techniques; to the tools you need to meet the opportunities and challenges that lie ahead. All you have to do is enter, listen and learn."

Builders apparently took this advice to heart, as thousands of them visited the exhibition areas in the giant Coliseum and at the Hilton and Sherman Hotels where more than 400 building products were on display.

Of special interest to builders was the Unified Gas Exhibit, which covered four aisles and occupied 4,300 square feet of floor space in the Coliseum. Focal point for builders was a display of ten beautiful kitchens and laundries designed by these shelter magazines in cooperation with leading cabinet manufacturers:

New Homes Guide and Geneva Modern Kitchens; *Good Living* and Wood Mode Kitchens; *House and Garden* and St. Charles Manufacturing Co.; *Living for Young Homemakers* and Nevamar Carefree Kitchens; *Better Homes and*

Gardens and Fashionwood Kitchens; *Good Housekeeping* and Dimensional Kitchens; *Living for Young Homemakers* and Elkay Manufacturing Co.; *Woman's Day* and Mutschler Bros. Co.; *American Home* and Toledo Desk and Fixture Corp.; and *Everywoman's Family Circle* and the I-XL Furniture Co.

All of the above kitchens already have appeared as editorials or are scheduled for feature treatment in 1960.

Builders interested in trends in kitchen planning found the Unified Gas Exhibit a treasure trove of ideas.

Gas appliance manufacturers also filled the area with exhibits of their 1960 home appliances. Roper, Whirlpool, Rheem, Hardwick, Norge, Philco, Cribben & Sexton, Dixie, Easy, Waste King, Hamilton, Tappan, Sunray, Magic Chef, Caloric and Ruud were among the exhibitors of modern gas appliances for the home.

Women who are prominently identified with gas also were starred at the NAHB Convention. Mrs. America, Mrs. Margaret Priebe of Des Moines, Iowa, was official hostess for the builders' show. She made personal appearances at the General Sessions, on radio and TV and at the Johns-Manville exhibit during the five-day meeting.

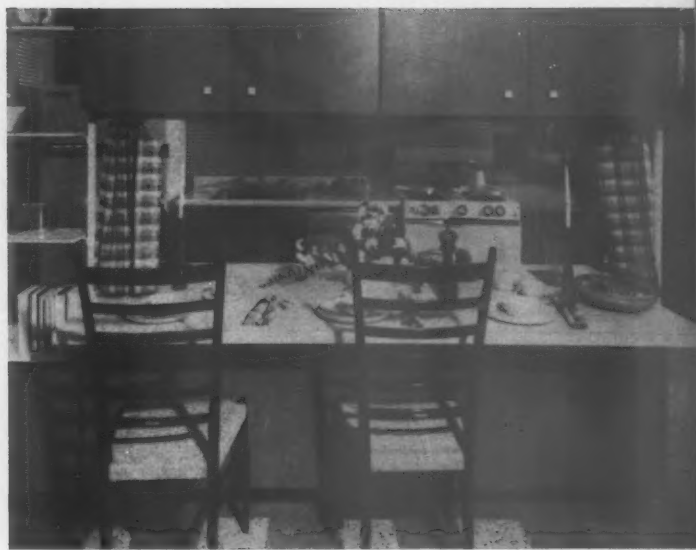
The gas industry was further represented by Miss Mildred Clark, home service director of the Oklahoma Natural Gas Company, who spoke to approximately 600 members of the NAHB Sales Managers' Club, Tuesday morning, January 19th, at the Sherman Hotel. Her talk, entitled "How Builders Can Use Utility Company Programs," was enthusiastically received.

Miss Clark is highly qualified to talk on this subject. She directs a staff of 25 people, all of whom are directly engaged





Circular kitchen designed by LIVING for Young Homemakers was one of the eye-catchers in the Unified Gas Exhibit



GOOD HOUSEKEEPING Magazine designed this handsome kitchen with built-in dining area, one of 10 featured at Chicago

in some phase of consumer activity. She has served on the national A. G. A. New Freedom Gas Home Committee for 14 years and was chairman in 1956 and 1957, the only woman so honored. This is the committee that developed the gas industry's new Blue Star Home Promotion for builders. She is considered an authority on kitchen and laundry room planning and devotes most of her time to her company's builder program.

As her audience listened attentively, Miss Clark spoke for 30 minutes on the stake that utility companies have in local building, of the services they provide both the builder and the buyer, and the value to builders of the industry's new Blue Star Home Promotion.

"There is an important relationship between the utility and the builder. Builders build homes, utilities serve them. Both deal with the same customers.

"You may wonder why utilities are so willing, even eager to assist the builder in selling homes. The reason is simple: more than 50% of a utility's total revenue comes from its residential market. Each day over the life of the house, the utility supplies the power to operate the home. A utility is basically a service company. In most areas, the gas company plays an active role in the life of the community. It has a major financial investment in the community as well.

"This tremendous investment of money, manpower and know-how can be placed at the disposal of the builder. The money, invested in plant and equipment, provides modern, dependable service. The manpower investment represents highly trained personnel from the top down, all experts in some phase of gas operation. To the builder it may mean skilled help in installing and servicing gas equipment in

these homes. Or it may mean the services of professional advertising, promotion, public relations and home service experts who can put their know-how to work to help the builder advertise, promote and demonstrate his homes to the buying public. Whatever his need may be, the reputable builder will find his local gas company ready, willing and eager to cooperate with him.

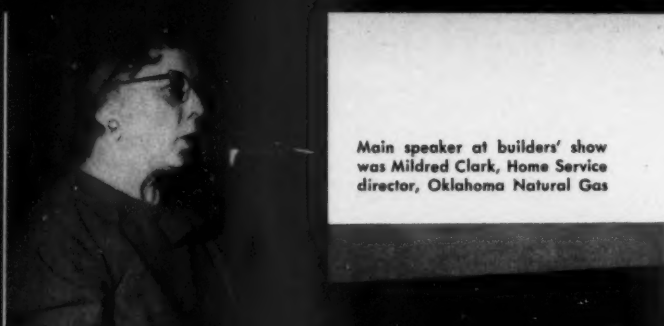
"As a further aid in helping builders sell homes, the gas industry recently developed a national program called 'The Blue Star Home Promotion.' It is designed to focus attention on quality homes and to help both the utility and the builder win a larger share of the new home market.

"This is the first builder program specifically designed to help builders offer prospective home buyers a guide to modernity and comfortable living. It is the result of a year-long series of meetings and consultations between utilities, builders and builder associations in all parts of the country.

"While national in scope, the Blue Star Home Program is designed to supplement existing local builder programs and provide minimum standards for areas wishing to set up a builder program. It is also designed to give the local builder the full benefit and impact of national advertising and promotion of the Blue Star Home symbol. This is the outline of a house with a blue flame in the center of a blue star, and the slogan, 'Go Modern—Go Gas.'

"To identify with the program, builders and utilities must comply with minimum requirements of the program but can up-grade these requirements any way they choose.

"The Blue Star Home Program will be backed by intensive national and local advertising and promotion campaigns. Leading national magazines and building publications have



Main speaker at builders' show was Mildred Clark, Home Service director, Oklahoma Natural Gas



This attractive laundry room, featuring a gas water heater and dryer, was designed for the show by NEW HOMES GUIDE Magazine



The new Norge gas refrigerator is a featured attraction of the compactly laid-out kitchen designed by HOUSE & GARDEN Magazine

scheduled feature stories on Blue Star Homes through 1960. Many of these will be similar to the ten-page, full-color editorial on the 'Blue Star Home of the Year' in Columbus, Ohio, which appeared in the September, 1959, issue of *Good Housekeeping Magazine*. *Good Housekeeping* is also planning to feature a Blue Star Home in 1960 and *Parents' Magazine* will feature a Blue Star Home in Cleveland, Ohio, in its June issue. There is a strong possibility that *McCall's* and *Better Homes & Gardens* will also present feature articles on Blue Star Homes this year. I am told that both *Look* and *McCall's* magazines are planning their builder programs around utility cooperation in 1960.

"I predict that the gas industry's Blue Star Home Program will be the biggest, most popular builder program in the country within the next year. Why? *Because it meets the needs of builders.* Unlike most programs, which are designed to sell certain products, the Blue Star Home program is designed to sell homes. It is the builder that receives top billing. By helping him to establish his reputation as a builder of quality homes at moderate prices, by promoting the Blue Star Home symbol as a guide to modernity, quality and comfortable living the utility focuses attention on the builder and his homes.

"To illustrate, let me tell you about my company's program for builders. Ours is a cooperative program which localizes and interprets the national Blue Star Home Program to meet individual builder's needs. To date, more than 90 builders, with plans for 2,500 homes ranging from \$9,500 to \$50,000, have signed agreements with us. These agreements differ to some extent because the requirements of each builder differ.

"There are 10 major points to our program. Briefly stated they consist of the following:

"1. Cooperative assistance on the builder's advertising, to bring together appliance manufacturers, plumbers and similar related suppliers. This gives uniformity and impact to all sales messages about the Blue Star Home.

"2. Special newspaper supplements, usually carried in the real estate section of leading newspapers, are prepared around the Blue Star Home and its outstanding features. In addition to the ads, editorial copy about the house and its equipment, attractive illustrations, floor plans, and diagrams, are prepared by our staff. To date, we have received excellent cooperation on these from editors in our area.

"3. Wide use of local radio and television programs further advertise the Blue Star Home. My company also sponsors a Sunday TV program known as 'Builders' Showcase' which informs the public about outstanding builders and their homes.

"4. We also prepare handsome brochures describing the Blue Star Home with biographical information about the builder to inspire confidence on the part of the buyer. These are made available to the builder as hand-out pieces at his homes.

"5. Also available to the Blue Star Home Builder are a host of promotional items built around the Blue Star symbol. These include directions and site signs for model and tract homes, truck and bus cards, decals, balloons, bronze discs, banners, pennants, badges, aprons, cigarette lighters, jewelry, window and counter cards, to name only a few items.

"6. Full assistance in kitchen and laundry room planning by experts in our home service department is another feature

of our program. In addition, we accessorize and dramatize the kitchen so that women visiting the model home can visualize working in such a kitchen of their own.

"7. Home service also helps the builder show his home to the public, by explaining the equipment, answering questions about schools, stores, churches, transportation and other details about the community and the neighborhood. Ours is a total selling job for the builder.

"8. And our job doesn't end when the house has been sold. Our home service girls call on the new owner to acquaint her with the new features of the modern gas appliances the builder has chosen for her home. And, of course, we offer life-time inspection and adjustment service on these appliances to the owner.

"9. The builder can also avail himself of the services of our engineering staff. They are experts on house heating, air conditioning, and other phases of gas operation. They can often save the builder money by pointing out better, more efficient methods of installation of equipment. Proper sizing, too, is important and generally requires the advice of experts.

"10. Tract builders frequently call on us to arrange press parties to tie in with publicity on their homes in advance of its opening to the public. In connection with this, we also provide exhibits of the model home and the appliances that go with it in our sales rooms.

"As you can see, this is a carefully thought-out program, based on the philosophy that what is good for the builder is good for us. It has been highly successful in helping builders sell homes in Oklahoma. Similar programs are offered to builders by gas companies in other parts of the country. I sincerely urge you to take advantage of the know-how, cooperation and sales assistance utilities can provide.

"I believe that you will agree, once you investigate the Blue Star Home Program, that it offers you the builder *real benefits*—not just features. We have the sales program, you have the homes. Let's get together."

Another feature of the builders' show was an exhibit of five Scholz homes in the Suburban Woods subdivision of Olympia Fields. This is a development of homes in the \$25,000 class, served by the Northern Illinois Gas Company. Home service girls from the gas company served as hostesses in the Scholz gas homes, answering questions from builders visiting the equipment.

Four of the prefabricated houses were erected in advance of the NAHB Convention and the fifth was erected the morning of January 21. The house was put "under roof" in exactly two hours and the house was completed, with equipment installed and the gas turned on, within 6½ hours. This was a Blue Star Home. Another Blue Star Home was the Rio Grande model. An estimated 1,200 builders visited the homes during the convention.

The Scholz Blue Star Home promotion was the result of cooperation between A. G. A.'s Gas Home Bureau and the Northern Illinois Gas Company. Equipment in the gas homes consisted of a washer and dryer by RCA Whirlpool, Tappan built-in cooking units, a 40-gallon water heater by John Wood and a Round Oak floor furnace.

The five Scholz homes, each a different model, ranged in price from \$42,000 to \$67,000. The Scholz agent has indicated that all five homes will meet Blue Star Home specifications in the near future.



This kitchen, designed by WOMAN'S DAY Magazine, provides another view of the Norge gas refrigerator, recessed into wall



Built-in gas oven and gas barbecue highlight this kitchen by NEW HOMES GUIDE Magazine, whose gas laundry is shown opposite

Dixie Fold-A-Way gas burner units create a focal point in this Paul McCobb-WOMAN'S DAY kitchen featuring fruitwood cabinets



● Highlights from projects scheduled for 1960, shown in photos below, represent a

Bold research plans announced for 1960

An active and exciting year of advances in many fields by the Association's PAR Research Program, is predicted in a recent report to the Board of Directors by A. G. A.'s General Research Planning Committee.

The report, delivered by Fred W. Batten, vice president, Columbia Gas System Service Corp., and chairman of the committee, outlined PAR Research plans for the year in such areas as domestic, commercial and industrial utilization; gas operations; air conditioning; and pipeline transmission. Included is a separate category of Special Projects, which will cover fundamental research and projects that cut across other fields. Development of thermo-electric generators and gas fuel cells are among such special projects.

Two of the targets in domestic research are better coordination of ignition, combustion, and venting; and simplified and less expensive controls. Other goals in this area are built-in water heaters, improved water heaters of all types, improved individual room heaters, and less expensive house piping for heaters. In an attempt to compete with electricity in househeating even more successfully, the Association will conduct a survey in order to determine what hardware is most economical for each area.

Research in the industrial and commercial field will concentrate on the development of gas infra-red burners. In addition, a gas tank heater will be field-tested and restaurant meal preparation will be surveyed in order to discover what newer cooking methods require and what chefs desire.

In the area of gas operations research the Association will intensify its investigation into oil shale gasification. It will also explore new methods of storage, distribution, and concentration, and new materials.

Air conditioning projects will include completion of a 15-ton high-efficiency air-cooled absorption unit and development of a 50-ton engine-driven heat pump. In addition, researchers will investigate applications of both large and small turbines for gas air conditioning.

A major area of research will be the thermo-generation of electricity. In June the demonstration thermionic converter being built by Thermo Electron Engineering Corp. will be tested. Plans call for a 200-watt unit.

Still another project will be on development of a methane fuel cell. The recent application by Allis-Chalmers, in which fuel cells powered a heavy tractor, was considered a real breakthrough. A. G. A. plans to cooperate with this firm and other firms in related research.

During 1960, work will be done on developing gas mantles with a longer life.

In its report, the committee also predicted research for the future.

Projects will include readily usable multitatic walls and modules that conceal appliances; appliances that will automatically thaw and complete the cooking operation, possibly by forced convection; new and better designs for radiant burners; thermostatically controlled top burners and grills on nearly all ranges; still more reliable automatic ignition; small, but more efficient, air conditioners and heaters; water heaters reduced in size, but not in performance; local water heaters that can be installed at each major point of use; easier leak detection and repair; more efficient pipeline operation through automation; liquefied natural gas shipment that is more common and less expensive; development of the fuel cell and thermionic and thermoelectric generation; and more efficient use of gaseous fuels.



This is the free piston engine compressor that was developed by Battelle Memorial Institute.

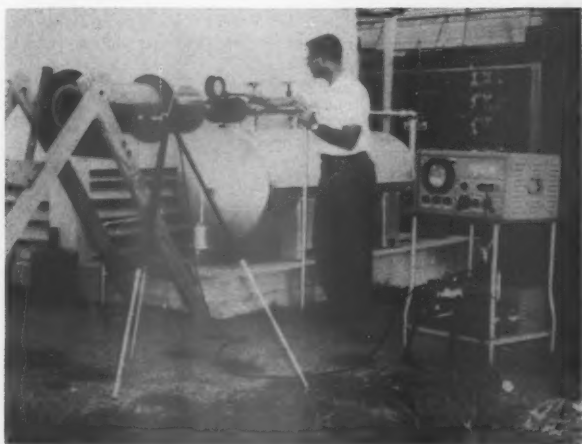


This unit is a model of the self-powered air furnace that needs no electrical energy.



This is a design for a three-ton new Onan gas-fueled engine.

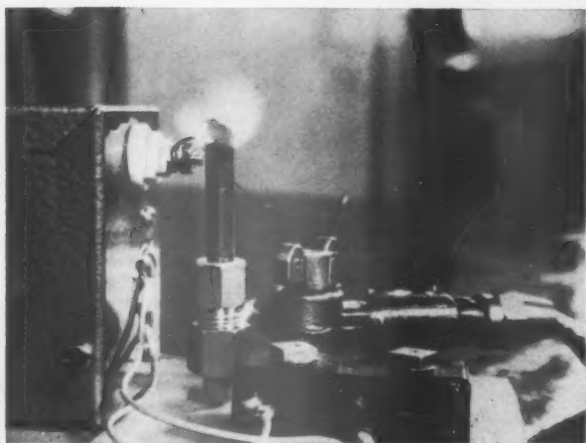
represent a few of the possibilities being aggressively explored under PAR Research



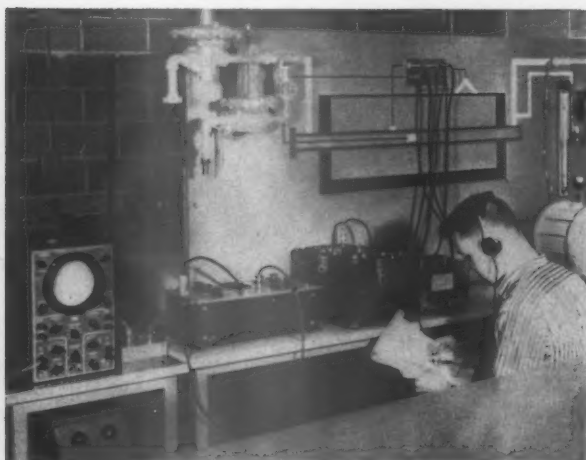
A researcher tests the initial working abilities of an experimental blow-down silencer



A pie crust and a cake are baked at the same time by a Schwank top burner and an A. G. A. counter-level burner



This is a six-volt gas igniter that produces a sharp, safe spark with no electrical connection



Here are the control panel and instruments used in the sonic method of leak detection at I.G.T.



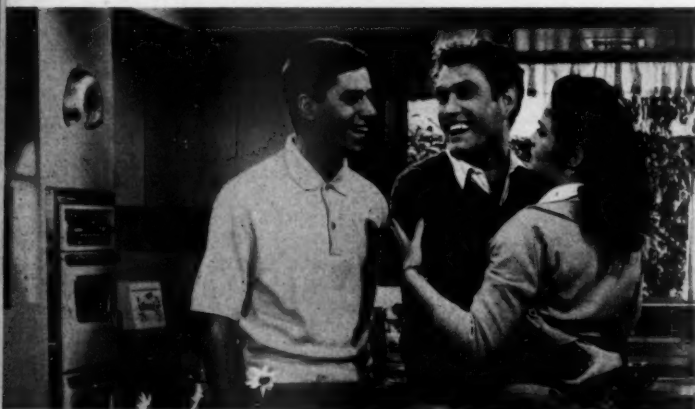
A researcher at Southwest Research Institute studies the problem of noise at gas regulator and metering stations



Doris Day, starring in the current hit, "Pillow Talk," gets upstaged by a built-in gas range and oven in this kitchen scene from the movie



Betsy Palmer presents a soothing picture as she brews coffee on a gas range for "The Last Angry Man," a recent film by Columbia Pictures



Jerry Lewis, Earl Holliman, Joan Blackman and a Gaffers & Sattler built-in gas range are featured in "A Visit to a Small Planet," by Paramount



Doris Day stars again, this time with Jack Lemmon, in Columbia Pictures' "It Happened to Jane." Gas range, refrigerator play supporting

*Hard working gas appliances turn
Hollywood roller-coaster into escalator
by maintaining lead in movies, TV*

Top Hollywood billing builds glamour for gas

In Hollywood, the saying goes that "When you're at the top, there's only one direction to go . . . down!" Yet, gas appliances have disproved this theory year after year, by starring in over 90% of all motion picture and television kitchen scenes filmed, taped or produced "live" from Hollywood!

Pat Nicholson, A. G. A.'s Hollywood Bureau manager, disclaims any secret success formulas for this outstanding record in a highly competitive field. "We do it with fast, dependable service," he says, "and then stay with it."

Whatever the formula, the results are there for all to see—on the screen. And this PAR activity's 1959 record is at the top once again. A total of 509 gas appliances appeared in more than 1,100 TV shows, 450 TV commercials, 40 motion pictures, six documentary films, and seven publicity and advertising photographs.

In addition to TV series already es-



Debbie Reynolds raids the gas refrigerator from M.G.M.'s new picture, "The Gazebo"



Donna Reed uses an O'Keefe & Merritt washer-dryer combination in the network "Donna Reed TV Series"



Ozzie and Harriet Nelson find the gas range at dinner time a romantic spot on their own TV show

established as gas "exclusives," including "The Donna Reed Show," "December Bride," "The Loretta Young Show," and others, the Bureau took some plums among the season's new offerings. These included "Fibber McGee and Molly," "The Gisele MacKenzie Show," "The June Allyson Show," "The Many Loves of Dobie Gillis," "The Betty Hutton Show," and others.

"The Donna Reed Show provides a good example of how multiple benefits are obtained from these TV tie-ups," explains Nicholson. "Using gas kitchen scenes almost every week, this show, with photographs showing the gas appliances, was the subject of a feature article in a national consumer magazine—and two gas appliance manufacturers used it as a vehicle for promotion and advertising."

"TV commercials which are shown and re-shown nationally are also a prime target, because of the proven value of

the mass exposure they provide," Nicholson adds.

Here again, gas appliances received the lion's share of exposures, serving as the setting for demonstrations of nationally advertised products, among them Kellogg's, Swansdown, Kaiser Steel and Aluminum, Pet Milk, Johnson's Waxes, Kleenex, Kraft Foods, Bayer Aspirin, DuPont, Carnation Milk, Procter & Gamble Products, and Tide Detergent. Many of these commercials become outstanding "breaks" for gas, as did one TV spot for Tide Detergent, which used 25 gas appliances.

Of the 40 motion pictures using gas appliances in '59, Nicholson predicts rich promotional rewards in 1960 from several, including M.G.M.'s "Please Don't Eat The Daisies," starring Doris Day and David Niven; "The Gazebo," starring Debbie Reynolds and Glenn Ford; and Paramount's "Cinderella," starring Jerry Lewis.

Besides placing gas appliances in sets, the Hollywood Bureau handles special assignments. With the cooperation of Paramount Studios, eight top movie stars were signed to endorse fine gas restaurants in a spread in a national restaurant magazine.

The Jimmy and Gloria Stewart Christmas campaign was, of course, the year's biggest movie star promotion. The Hollywood Bureau coordinated set design and construction at Warner Brothers for the TV commercials and dealers' film, and prepared and released newspaper and magazine stories and photos.

Following this, complete kitchen remodeling was done in the Stewarts' home, with the cooperation of the Mutschler Cabinet Co., O'Keefe & Merritt Co., and Whirlpool Corp. The *Ladies' Home Journal* plans editorial coverage

(Continued on page 31)



Wives of Oklahoma Natural employees, like Mrs. H. J. Chambers, above, served as hostesses at open houses. Typical home, right, has gas built-in range, refrigerator, dryer, yard light, central heating and cooling



Blue Star scores for Oklahoma Natural

Since last summer, when Oklahoma Natural Gas Co. launched its local Blue Star program, the utility's small but aggressive sales force has achieved a remarkable success.

By January 1, these were the figures:

In Oklahoma City, 347 Blue Star homes.

In Midwest City, 130 Blue Star homes.

In Tulsa, more than 1,000 Blue Star homes.

And add hundreds more for Edmond, Norman, Stillwater, Muskogee and other towns in the Sooner state.

In all, Oklahoma Natural reports, more than 2,500 Blue Star homes, priced between \$9,500 and \$50,000, were contracted by some 90 home builders in the company's service area, in the last six months of 1959.

This compares to a total of 3,264 building permits issued in the same area during this period.

With the Blue Star emblem gracing their lawns, participating builders in most cases are more than meeting basic requirements. They seem eager, Oklahoma Natural reports, to provide more than the single required outlet, and in many instances are installing one or more optional appliances—gas refrigerator, clothes dryer, bathroom heater, air conditioning system and yard light. In fact, the attractive gas yard light identifies most of the Oklahoma Natural Blue Star homes.

Oklahoma Natural began its Blue Star program after the A. G. A. committee under Oklahoma Natural's sales vice president H. Vinton Potter put the nation-wide program into action.

How has Oklahoma Natural made this great leap forward in six short months?

"First, we had excellent cooperation with home builders," explains Lew Libby, director of the Blue Star promo-

tion at Oklahoma Natural. "In the past we had worked closely with them on parades of homes, special co-op advertising and all-gas home ventures. Second, we were convinced that the Blue Star promotion would prove the right approach to helping builders sell more homes more profitably. And so it has. For example, several former builders of Medallion homes now build Blue Star exclusively."

Each builder agreement signed by Oklahoma Natural is unique because builders' requirements differ. But, generally speaking, the utility offers a number of regular promotion features, depending on the degree of builder participation and the number of homes the builder expects to construct.

Here is what Oklahoma Natural will do: cooperate with the builder on his advertising; provide newspaper space, radio or television time; print promo-

(Continued on page 33)

*Atlantic City this year will offer
new facilities, renovated convention hall*

'Soaring '60's' Convention theme

Soaring Sixties—Decade of Opportunity" will be the overall theme for the 1960 A. G. A. Convention in Atlantic City, New Jersey, October 10-12.

A spectacular exhibit of new gas industry developments from the wellhead to the burner tip, and numerous program innovations, promise to make this the best attended A. G. A. Convention in many years, according to Marvin Chandler, Committee Chairman.

To millions of Americans, Atlantic City means Convention City. Surveys indicate that the resort is a favorite with most gas industry people, and it has entertained more big national conventions and exhibits than any other city. Gas people like its compactness and the fact that its facilities center on the Boardwalk where everybody meets everybody else.

A \$3½ million renovation program, to be completed by June 1960, will provide one of the most modern and attractive convention halls in the world. The mammoth building will boast an ultra-modern Boardwalk front, completely redesigned main lobby, an all-weather tunnel in which up to twenty taxi cabs can unload at the same time, and two-way escalators serving all levels of the building.

Even more important, the huge convention hall will include thirty-three light and cheerful meeting rooms which can accommodate groups ranging from 125 persons to 35,000 persons. This means that the gas industry will be able to hold its entire Atlantic City Convention under one roof for the first time. Most of the meeting rooms are adjacent

to the exhibit hall, so that delegates will have the maximum possible time to visit the Convention Exhibit before and immediately after attending the various sessions.

As a special added attraction, this year's Convention will feature a separate program for the ladies. This probably will include a morning General Session, a Get-Acquainted Coffee Break, and a ladies luncheon and party. A program of entertainment and dancing will be provided for delegates and ladies at the President's Reception on Monday evening, October 10.

Many of the 10,000 first-class hotel rooms in Atlantic City have been completely renovated during the past few years. In addition, a number of fabulous motels and resort motels have been erected. The latter offer complete hotel service and even include suites and restaurants.

Meetings of the various Sections will be held in the Convention Hall itself, but the following hotels have been designated as Section headquarters:

Accounting Section—Chalfonte-Haddon Hall Hotel.

General Management Section—DenNIS Hotel.

Industrial & Commercial Gas Section—Traymore Hotel and Colony Resort Motel.

Operating—Shelburne Hotel and Empress Motel.

Residential Gas Section—Traymore Hotel and Colony Resort Motel.

The Colony Resort Motel is under the same management as the Traymore. The

Empress Motel is under the same management as the Shelburne and is connected to the Shelburne Hotel by a covered passageway.

Early in February the official "PRE-registration and Housing Application" will be mailed to all A. G. A. members. Each delegate will be asked to send in his \$25.00 PREregistration fee for the Convention at the time he writes to the Housing Bureau in Atlantic City for his hotel or motel accommodations.

Membership of the General Convention Committee is as follows:

Marvin Chandler, president, Northern Illinois Gas Co., chairman; Robert M. Brigham, vice president, Springfield Gas Light Co.; Walter E. Caine, vice president, Texas Eastern Transmission Corp.; W. M. Jacobs, vice president, Pacific Lighting Corp.; T. H. Kendall, president, South Jersey Gas Co.; Bruce A. McCandless, vice president of sales, Milwaukee Gas Light Co.; Gerald T. Mullin, president, Minneapolis Gas Co.; E. A. Norman, president, Norman Products Co.; Christy Payne, Jr., manager market development, Consolidated Natural Gas System; H. Vinton Potter, vice president, Oklahoma Natural Gas Co.; Karl W. Schick, sales manager, Residential Division, Minneapolis-Honeywell Regulator Co.; Willis A. Strauss, executive vice president, Northern Natural Gas Co.; Hugh L. Wathen, vice president, South Jersey Gas Co.; Robert H. Willis, assistant vice president, Stone & Webster, Inc.; J. H. Wimberly, president, Houston Natural Gas Corp.; Jac A. Cushman, American Gas Association, Secretary.



L. T. Potter, left, Lone Star Gas Co., and Edward A. Norman, GAMA, officially dedicate Center in a "gaslighting" ceremony

Gas Appliance Center dedicated in Dallas

Below, David J. Kerr, president, Gas Industry Exhibitors; Mrs. Loyce Campbell, hostess; and Trammell Crow, developer



Part of the more than 100 civic leaders

A gleaming new showcase for the gas industry, the Gas Appliance Center in Dallas, Texas, opened to the public in January.

Taking a place beside A. G. A.'s gas exhibit in the National Housing Center, Washington, D. C., the Gas Appliance Center in Dallas is a permanent, year-round display serving one of the largest and fastest-growing gas markets in the country, the Southwest.

Occupying 25,000 square feet in the new \$18 million Dallas Trade Mart, the Gas Appliance Center was formally opened in dedication ceremonies January 16, before an invited audience of

Discussing new Center are Raymond Hale





00 civic leaders who attended the opening



Typical of the Center's display areas is this Hardwick Stove Co. showroom

more than 100 civic leaders and gas industry executives.

Following its dedication, the Gas Appliance Center was a feature attraction of the Southwest Home Furnishings and Furniture Market, January 18-22, during which the gas exhibit was viewed by approximately 9,000 buyers.

Edward A. Norman, president, GAMA, was principal speaker at the opening ceremonies. Lester T. Potter, first vice president, A. G. A., and president, Lone Star Gas Co., welcomed guests and exhibitors to Dallas. Trammell Crow, owner and developer of the Gas Trade Mart in which the Center is

housed, greeted visitors to the building.

The Gas Appliance Center is financed and managed by Gas Industry Exhibitors, Inc., of which David J. Kerr, Southern Union Gas Co., is president.

Besides the Home Furnishings and Furniture Show, several other major markets held annually in Dallas will feature the Center. In addition, the Center will attract such groups as architects, builders, decorators, designers, home economists and gas utility representatives.

Located on the second floor of the Trade Mart building, the Gas Appliance Center will have a full-time manager and hostess who will assist in arranging

displays, escorting visitors through the Center and managing daily operations. The staff will also participate in a year-round promotional program designed to stimulate attendance at the Center.

Of the approximately 2,500 square feet of floor space in the Center, more than 2,000 feet will be devoted to a permanent industry exhibit. This space will house such displays as an all-gas kitchen and laundry, heating and air conditioning equipment, and exhibits depicting various industry phases.

An additional 1,500 feet will be used as a general exhibit area where small

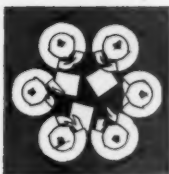
(Continued on page 34)

ure Raymond Hale, Jim Carll, Joe B. Woods



Whirlpool showroom below is one of 21 by manufacturers already leasing space





Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons

Assistant Personnel Manager
Philadelphia Electric Co.

● What makes men want to work?—In the November 1959 issue of *Personnel*, Frank J. Mikel stated that one of the most important challenges confronting management today is getting employees to work at their peak capacity. Industrialization, he said, has simplified work to the point where it satisfies no more than the basic human needs for food and shelter. As a result, management must find ways to motivate workers to produce more than the acceptable minimum and ways to restore some intrinsic meaning to work itself. According to Mr. Mikel, only by investing work content with more and more challenge, instead of with less and less, can management hope to harness the unused energies and abilities that must come into play if workers are to deliver peak performances.

A three-year study made by a large manufacturing company recently revealed that employee enthusiasm and loyalty are generated in a work environment that presents more challenging work assignments, rather than in one where work responsibilities are progressively reduced. In other words, where responsibility is encouraged, performance increases.

In the past, wrote Mr. Mikel, fear was the primary motivation for workers. Today, however, because social changes have dispelled fear as a motivational force, the need for an alternate driving force has led management to an over-concern with "employee satisfaction." Efforts in this direction have made some workers happy, but have not succeeded in making them work, he concluded.

● Retirement suggestions from a famous senior world citizen—In the December 1959 issue of *The Rotarian*, Cyrus S. Ching said this on the challenges and problems of retirement: "Attitude of mind is very important. If people could lose the thought that they are being placed on the shelf and are burdens to society, and would realize that they are still capable of contributing much, it would benefit them greatly."

● Scarce social scientists—"At the New York headquarters of giant AT&T," wrote Peter B. Bart in *The Wall Street Journal*, "there are over 30 social scientists working on various projects. Another 40 work at the company's Bell Laboratories. A number of sizable companies, such as General Foods, Eastman Kodak, and Dow Chemical, are backing research projects through the Foundation for Research in Human Behavior in Ann

Arbor, Michigan. . . ."

Mr. Bart discussed the growing role of the social scientist in industry and concluded that the biggest problem today in the social science field is the scarcity of qualified men. He also quoted a top research official of a large concern as follows: "You can't hire a man who has just taken a few sociology courses in college—he will get completely lost. On the other hand, if you hire a brilliant professor, the chances are he won't be understood."

● Personnel book for plant managers—*Personnel Administration: Evaluation and Executive Control* is a book for both the personnel specialist and the general management man. It was written by James H. Taylor, formerly director of industrial relations for Procter and Gamble, and published by McGraw-Hill Book Co., Inc. The book contains 326 pages and sells for \$7.

The book is recommended for the reader who wishes to get personnel administration into perspective. Mr. Taylor, whose opinions and advice are fresh and perceptive, is a man who takes a position on his subject on the basis of his outstanding experience in the field.

● Court decisions: United States judge scolds Labor Department for FLSA case against well meaning employer—A federal district judge in Alabama has scolded the Labor Department for bringing an injunction suit under the Fair Labor Standards Act (FLSA) against a company that it says "has attempted to give aged and disabled employees an opportunity to earn a livelihood in the twilight of life and . . . has acted in absolute good faith. . . ."

The suit was against Miller and Co., Inc., and K. C. Haughton, its purchasing agent and personnel manager. The company, which distributes lumber and hardwood flooring, has 200 employees at its Selma, Ala., plant, the one that was involved in the case.

One FLSA violation that was charged was that the company had failed to pay the \$1 minimum wage to six disabled employees. Judge Daniel Holcombe Thomas said that the company "did not want to turn them out in the cold, but was fearful that it could not retain them due to the fact that their earning capacity was below minimum wage standards."

The company had employed M. B. Allen, "an experienced labor consultant," who subsequently advised Mr. Haughton that he would apply for handicapped workers' certificates. Unfortunately, the applications "never reached the office of the Wage and Hour Division." The company, however, "acting in good faith upon the assumption that the applications had been accepted, proceeded to pay the six employees 75 cents an hour during the period between March 1, 1956, and the present."

Other alleged violations involved a trainee who had a fixed salary with discretionary working hours; an employee who privately received a bonus that was not included in his regular pay for computing overtime; and the janitor who cleaned the company's offices at the rate of \$33 for 33 hours worked, but for whom the company kept no hourly records.

This was one of the court's findings of fact:

The evidence overwhelmingly shows that no employee was dissatisfied with his salary. No complaint had been made to either the Wage and Hour investigator or to the employer. The employer has at all times endeavored to provide adequate employment for all of its old employees who have passed the prime working years of life, and in many instances has paid sums of money to them after they have been forced to discontinue working. The improper procedure as to the disability certificates has been corrected.

The company has had seven Wage-Hour investigations since 1941, the court said, and it has always treated the investigators courteously and "made every effort" to comply with their recommendations. The court also said that it would serve no useful purpose to review the other infractions uncovered, since they have already been corrected.

In his conclusions of law, Judge Thomas said that the purpose of the FLSA "should not be lost to view in an overzealous endeavor to bring into a court of equity every past minor infraction of the rules." His final statement was this:

This case has been disposed of so far as this court is concerned, and the injunction will not be issued. However, it should be emphasized that this court is of the opinion that this case should never have been filed. The government has gone to considerable expense in convening the court and bringing witnesses from distant places, not to mention the attendant inconvenience to all parties concerned. This expense and inconvenience was caused by the seeking of an injunction against a company which has attempted to give aged and disabled employees an opportunity to earn a livelihood in the twilight of life, and which, in so far as this court has been able to determine, has acted in absolute good faith in all of its employees, as well as with the Wage and Hour Division of the Department of Labor.

This is not to imply that the Wage and Hour Division does not serve a useful purpose in seeing that the provisions of the Fair Labor Standards Act are complied with in meritorious cases.

Gas research stars at science show



Earl Tornquist, Northern Illinois' gas research engineer, demonstrates gas thermo-electric generator at Chicago show



Gas industry display, featuring new developments in several areas of research, intrigued scientists of all kinds during January meeting

Gas industry research was spotlighted before scientists of the nation early last month.

The occasion was the American Association for the Advancement of Science show, held at the Hotel Morrison in Chicago the first week of January. Research activities and achievements of the gas industry gained attention of the delegates—scientists in all fields—through a special exhibit sponsored by the Northern Illinois Gas Co.

By means of posters, demonstration models, and printed literature, Northern Illinois' display portrayed gas industry research advances in several fields. These included techniques of making synthetic gas from coal, direct generation of electricity from gas heat by thermo-electric devices and by gas fuel cells, and the reading of gas meters by telephone.

Coal gasification, thermo-electric devices, and gas fuel cells are among subjects currently being actively studied or developed under A. G. A.'s PAR Research Program.

A. G. A. PAR Research-sponsored projects on thermo-electricity include work being done by the Thermoelectron Engineering Corp., of Boston, Mass., and experimental development work being done by the A. G. A. Laboratories on thermo-electric gas igniters and on a furnace which powers its own fans by thermo-electricity.

Fuel cells generate electricity through the chemical reaction of gaseous fuels, including propane or methane, rather than through combustion in the ordinary sense. Basically, a fuel cell is described as a primary battery capable of continuous operation by oxidation of the fuel. It has high efficiencies on the order of 60 per cent to 80 per cent, and is regarded as an extremely promising field of research. One recent demonstration featured a gas fuel cell-driven tractor.

A. G. A. currently is co-sponsoring a project being conducted at the Institute of Gas Technology to develop the methane fuel cell.

Gasification of coal, lignite and oil

shale, a subject of vital importance to the gas industry's long-range supply outlook, also is under intensive research at IGT, under direction of the PAR Research Program.

Several successful and entirely practical methods have been developed and tested. Illustrated in the Northern Illinois display was the hydrogenation process, which produces methane by combining hydrogen with the carbon contained in gases released by heating or combustion of coal or lignite.

The hydrogenation process also has been successfully applied to oil shale under the PAR Research projects, as has the synthesis gas-methanation process. The latter method makes use of catalysts to recombine hydrogen and carbon monoxide into methane.

An experiment in obtaining automatic meter readings over telephone circuits is being conducted by Northern Illinois' own research staff. It shows promise of applicability, especially to industrial meters.

Research and utilization conference scheduled for April 19-21

Progress in gas research and utilization will be thoroughly reviewed and discussed when industry leaders meet on April 19, 20 and 21, 1960 at the Hotel Carter in Cleveland, Ohio for the fifteenth annual A. G. A. Research and Utilization Conference.

Heading the conference as chairman is P. W. Kraemer, vice president, Minneapolis Gas Company.

A broad program of up-to-the-minute

reports in such vital areas as gas air conditioning, thermoelectricity, fuel cells and house heating competition, as well as research reports in cooking, water heating, ignition, incineration and other areas will be presented.

Prominent research agency, gas company and manufacturing company leaders will address the conference. Formal papers, luncheon addresses and clinic discussions will all be included.

The conference will be of interest and significance to technical, executive and sales personnel of both utility and manufacturing companies. It is presented under the sponsorship of the A. G. A.'s Committee on Domestic Gas Research in conjunction with the Utilization Bureau.

Details of the program and speakers will appear in a subsequent issue of the A. G. A. MONTHLY.

RCA Whirlpool renews co-sponsorship of Mrs. America contest

RCA-Whirlpool Corporation has renewed its contract to co-sponsor the 1960 Mrs. America Homemaking contest, Bert Nevins, president of Mrs. America, Inc., has announced.

RCA Whirlpool gas appliances will be used exclusively throughout the contest, 22nd annual national finals of which will be held in Fort Lauderdale, Florida, June 2-14th. Gas utility companies throughout the country will hold eliminations to select the outstanding

homemakers from the 50 states and the District of Columbia, each of whom together with her husband will be flown to Fort Lauderdale for the finals.

A Mrs. America Kitchen, now being introduced by the Whirlpool Corporation, features an RCA Whirlpool Gold Star gas range, gas refrigerator, freezer, washer-dryer, automatic dishwasher, and waste disposal unit. The kitchen will be a feature of the \$30,000 house to be presented to the new Mrs. America.

In addition to an all-expense-paid two-week vacation in Florida each state winner will receive a new RCA Whirlpool gas refrigerator.

The present Mrs. America, Mrs. Margaret Priebe of Des Moines, Iowa, mother of four, is currently making personal appearances throughout the country in behalf of the Whirlpool Corporation, visiting home shows, department stores, appliance dealers and gas utility companies.

Meet your Association staff



Chester L. Wegener

Chet Wegener, special service representative for the PAR Metropolitan Contact Program, is "Mr. Gas" to hundreds of television and movie producers, commercial photographers,

newspaper and magazine editors, food laboratory directors, educators and home economists in the New York area, for whom Chet supervises setting up of gas appliance and kitchen sets and displays.

Chet has earned his excellent reputation. By "doing the extra bit to make people happy," Chet has made friends of all his contacts, has continually gained new friends, and has never, to his knowledge lost one of these friends.

Tall, dark and handy Chet estimates that 85 per cent of his professional contacts are women, a fact about which many have joked but none has ever complained. Whoever his contacts are, all are provided with the same friendly and efficient assistance.

So much in demand is Chet Wegener that his name is sometimes confused with that of A. G. A.'s managing director, Chet Stackpole. So, for ready identification, Wegener often is called simply "the other Chet."

Chet not only has spent practically his entire working life in the gas business, but in doing so he has followed the family trade. Shortly after

graduation from high school in Hempstead, Long Island, Chet joined his father as an employee in the service department of the Brooklyn Union Gas Co.

Taking time out only for service in the ski infantry of the 10th Mountain Division during World War II, Chet remained at Brooklyn Union until seven years ago.

Borrowed from Brooklyn Union especially to conduct the Metropolitan Contact Program, Chet then began working out of A. G. A. headquarters. Four years ago the special assignment was made into a permanent job. Employed jointly by A. G. A. and GAMA Chet enjoys the unique distinction of working for both associations at the same time.

Chet commutes by train from his home in Merrick, Long Island, which he shares amicably with two more women—his wife, May, and his daughter, Maureen. Chet fishes—a rented boat, his own outboard—and golfs in the 90's. His score was 70-ish before shrapnel caught his leg one night in Italy. Not knowing rugged Chet was out of action, the Germans surrendered the next day.

Measuring the market:

Research for gas sales

By DANIEL PARSON

Director

A. G. A. Bureau of Statistics

Research: its very name conjures up two completely different concepts in the executive mind.

Through participation in the PAR program, through publicity accorded to the stimulating activities of IGT, and through individual company research in many cases, gas utility presidents have recognized for many years the significant advantages of technical research.

The glamorous development of new gas consuming appliances, techniques for more efficient and economical means of meeting gas supply problems, ways of introducing cost reductions in technical operating problems have all appealed greatly to our executives. They have rightly realized the direct advantages which would accrue to their respective companies from such technical research activities.

Why, then, have market research and economic research, and to a lesser extent rate research, been looked upon so coolly in past years? Perhaps part of the explanation lies in the growth rate with which our industry has been blessed. Research techniques directed toward new business development and increased sales using existing appliances have seemed less important, because sales were growing rapidly anyway. Under generally favorable competitive price relationships and the aura of a modern and efficient fuel, the public demanded

gas service and gas utilities grew and prospered.

But the current inroads of electric competition for the residential non-heating load, and of coal and oil for industrial business, are changing these basic facts of gas utility life. Business research is being accepted more widely by gas companies in the past few years, and its acceptance will continue to grow in the future. When customers no longer clamor for your product, and when your sales departments must earn their commissions through hard work by overcoming the arguments of competitive fuel vendors, such questions as relative effectiveness of alternative promotion techniques, the sales potential of various segments of the market, and the matching of dollar results with dollar expenditures, achieve greater significance. Such statistical evaluation becomes particularly important when the competition indicates its willingness to spend substantially more dollars than we apparently are able to spend.

There was another reason for the historical lack of emphasis upon business research. Utility companies have always relied heavily upon engineering graduates as a source of personnel at all levels from the president down. Under these circumstances, technical research, which is engineering-oriented, was appreciated more generally; while business research, which is not so oriented, awaited its moment of recognition.

There is no doubt that engineering graduates are capable of directing business research programs effectively. But

before doing so they *do require significant amounts of training and experience in disciplines foreign to engineering.* Engineering minds may not always be capable of evaluating accurately the profitability of alternative courses of business action, particularly when such actions do not lend themselves to precise measurement under controlled conditions. Many additional sciences, to be enumerated later in this paper, may be necessary adjuncts.

I have discussed some of the general considerations regarding the inadequate attention to marketing research and other forms of business research. Now let me turn to my recommendations regarding ways of increasing its effectiveness, the merits and disadvantages of alternative organizational locations, and methods of staffing the function.

Let me also emphasize that in presenting these ideas I am not speaking officially for the American Gas Association, and there should be no inference that these statements represent any official or unofficial Association policy. I am trying to be constructive, and to set forth my ideas as I personally see them.

Marketing research is one phase of the larger area which I prefer to call business research—the area concerned with profit maximization, company growth and prosperity, and efficient operation. Economic research, financial analysis, and rate research are other aspects of this basic function.

Much of the academic training and business experience essential for effective performance of these activities is

common to each of these activities.

As some of you may know, I am secretary of seven Association committees in the spheres of finance, economics, market research, and rates. I have always been surprised about the extent to which the interests of these presumably discrete committees tend to overlap on numerous problems. Many utility problems involve aspects of all these functions, so why should they not be coordinated?

If this over-all business research function requires the talents and abilities of people with various backgrounds to achieve maximum effectiveness it is obviously a vigorous argument in favor of coordination of all such related activities in one place within the company. Most utilities cannot afford the luxury of duplication of specialized talents in various departments. And if a coordinated business research department is established to provide assistance to all other departments of the organization, it obviously should be a staff department and report to a general executive, such as the president or the executive vice-president.

Such a staff department on business research could offer assistance to many departments and functions. Let me indicate, with only a *partial* listing, how this could be done.

On sales matters, it could interpret the impact of consumer attitudes, after these have been scientifically measured, upon future sales and load growth; evaluate the relative importance of various factors in conditioning or creating such consumer attitudes; analyze the probable effectiveness of alternative courses of action in modifying such attitudes; determine the effectiveness of differential promotional campaigns for various appliances based on consumer attitudes and the relative magnitude of the market; assist in the establishment of sales quotas based on differential saturation, consumer attitudes and preferences, and economic circumstances in different portions of the service area; and develop mathematical analyses intended to permit evaluation of advertising policies with regard to copy, media, selection, time of insertion and location of advertising placement. In numerous other merchandising and sales promotion activities its ability to measure and interpret consumer acceptance, attitudes and preferences would be most valuable

in fostering a more efficient and economical marketing policy.

With regard to operations, it could assist in developing more reasonable forecasts of consumer saturations and probable future housing growth in selected portions of the service area; undertake studies directed toward determining the average gas usage of various types of appliances; and analyze data on the load characteristics of specific appliances, or groups of appliances, to assist in distribution design problems.

With regard to rates, it could assist in the evaluation of the probable effectiveness of various promotional rates upon consumer acceptance, and determine whether the gains which might be realized from alternative rate treatments would serve to maximize revenues and profits resulting from sales for these specialized purposes.

From a financial standpoint, the business research department could evaluate the relative effects of various levels of alternative promotion activities in terms of the business and revenue growth resulting from such activities; provide more realistic revenue forecasting based on future customer and saturation forecasts as well as rate prognostications; evaluate alternative courses of action with respect to their cost-profit relationship; and in general provide invaluable assistance in analyzing the cost-profit relationship of all types of utility activities.

It is my conviction that locating all of the related business research functions within one department represents the only effective way in which a utility company can afford the diversified, but related, personnel essential to a truly effective business research program. And only by having such personnel working together as a team can research offer the maximum assistance to all of the departments in the company which can make use of its efforts.

The personnel which would be included would involve economists, market research people, sales analysts, rate analysts, statisticians, mathematicians, psychologists, sociologists, and specialists in related professions. Recognition of the interrelationship between these functions, and the advantages of working together as a team, is by no means a new concept. Such an approach has been widely employed by the more competent market research organizations of the country and by various other organ-

izations specializing in the new concept of operations research.

I was recently privileged to hear a speech by the economic analyst of United Airlines, my favorite common carrier. Their "economics" department is responsible for sales forecasts, estimates of profit under assumed operating conditions, forecasts of rate of return, analysis of necessary facilities to meet estimated long-range business forecasts, evaluation of relative profitability of alternative types of planes, the effect on profits of alternative scheduling proposals, and a wide variety of other problems essential to their profitability. This is the concept of which I am speaking for gas utilities; impartial and coordinated research directed toward maximizing the basic success of the company.

There is one specific additional advantage which establishment of an independent research department reporting to a top level executive can accomplish. Only by such a procedure can the company utilize its research personnel to obtain impartial, unbiased and uninfluenced evaluations of the effectiveness of the actions of its operating departments. Independent evaluation is a key procedure for insuring the effectiveness and profitability of the company as a whole.

Such research does not involve suspicion, nor interference with the activities of operating departments, but represents a continuing attempt by top management to assure itself that the company's expenses are being incurred in a manner which will benefit the company to the maximum.

The principal argument which has been offered in favor of locating research activities within an individual operating department is that the research personnel would thereby be more familiar with the specific problems of the department, would be able to work more closely with the department, and would be more directly oriented toward the problems of the department. This is indeed a significant argument, and it is not illogical to assume that research personnel who can specialize exclusively in sales problems can do a better job than market research personnel who must devote portions of their time to other problems as well. However, most utility companies do not have the budgets to enable them to establish a properly staffed and fully qualified business re-

(Continued on page 33)

Facts and Figures

Prepared by A. G. A. Bureau of Statistics

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING NOVEMBER 1959

(WITH PER CENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	November		October		First Ten Months of 1959	
	Units	Per Cent Change	Units	Per Cent Change	Units	Per Cent Change
RANGES (including built-ins)						
Gas	173,500	+ 1.4	194,500	- 8.3	1,700,300	+10.1
Electric	n.a.	n.a.	143,400	+ 6.1	1,395,300	+29.0
WATER HEATERS						
Gas	192,600	- 2.3	276,500	+ 4.0	2,563,800	+13.0
Electric	n.a.	n.a.	61,200	-21.8	687,200	- 0.4
GAS HEATING—Total	112,500	+ 7.2	170,900	+17.1	1,153,900	+23.5
Furnaces	87,100	+ 2.0	127,200	+18.8	900,800	+28.2
Boilers	11,100	+11.0	18,400	+ 0.5	118,500	+11.9
Conversion Burners	14,300	+50.5	25,300	+22.8	134,600	+ 7.1
OIL-FIRED BURNER INSTALLATIONS	62,030	+21.0	87,170	+ 9.9	525,500	+11.2
DRYERS						
Gas	58,260	+33.9	68,840	+ 5.5	370,220	+28.9
Electric	98,790	0.0	110,830	- 3.7	719,880	+15.4

Source: Gas Appliance Manufacturer's Association, National Electrical Manufacturer's Association, "Fuel Oil and Oil Heat," and American Home Laundry Manufacturer's Association.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING NOVEMBER

(MILLIONS OF THERMS)

	1959	1958	Per Cent Change
Month of November			
All types of Gas	7,436,200	6,551,200	+13.5
Natural Gas	7,251,700	6,361,800	+14.0
Other Gases	184,500	189,400	- 2.6
Twelve Months Ended Nov. 30			
All types of Gas	87,230,700	79,429,000	+ 9.8
Natural Gas	84,887,400	77,036,100	+10.2
Other Gases	2,343,300	2,392,900	- 2.1
November Index of Monthly Utility Gas Sales (1947-49 = 100)	274.2	241.5	+13.5

PERTINENT BUSINESS INDICATORS, NOVEMBER 1959

(WITH PER CENT CHANGES FROM CORRESPONDING PERIOD OF THE PRIOR YEAR)

	November			October		
	1959	1958	Per Cent Change	1959	1958	Per Cent Change
Industrial activity (1947-49 = 100)	148	141	+ 5.0	147	138	+ 6.5
Consumer prices (1947-49 = 100)	125.6	123.9	+ 1.4	125.5	123.7	+ 1.5
Housing starts, Non-farm (thousands)	92.3	109.4	-15.6	105.1	115.0	- 8.6
New private construction expenditures (\$ million)	3,318	3,100	+ 7.0	3,460	3,135	+10.4
Construction costs (1947-49 = 100)	178.5	170.8	+ 4.5	178.8	170.9	+ 4.6

Sales of gas to all consumers during November 1959 totaled 7,436 million therms, a 13.5 per cent increase over the 6,551 million therms sold in November 1958. The increase was due primarily to the colder weather experienced throughout most of the nation and the additional consumption of gas by the 876,000 new customers being served by the gas industry.

Residential, commercial and other consumers used 26.9 per cent more gas in November 1959 than in November 1958 and accounted for 51.7 per cent of the total gas sales. In November 1958 those categories accounted for 46.2 per cent of the total sales. Industrial sales of gas also increased, despite the adverse effects on the economy of the strikes in the steel and other metal industries. The 2.0 per cent increase in industrial sales was attributed to the heavy accumulation of steel inventories prior to the strike.

A. G. A.'s degree-day index was 29.6 per cent higher in November 1959 than it was in November 1958. However, due to the prevalence of cycle billing among most of the larger gas utilities, the November sales reflect a portion of the deliveries made in October.

Industrial production as measured by the Federal Reserve Board index was 148 (1947-1949 = 100) in November 1959, one point above the revised October 1959 index of 147 and seven points above November 1958. A. G. A.'s index of gas utility and pipeline sales was 274.2 in November 1959, an increase of 32.7 points over the gas sales index in November 1958.

During the 12-month period ended Nov. 30, 1959, utility and pipeline sales totaled 87,231 million therms, an increase of 9.8 per cent over the 79,429 million therms sold in the 12-month period ended Nov. 30, 1958.

The seasonally adjusted annual rate
(Continued on page 32)

● *Floods in New England put mutual assistance to a test as companies*

By J. EDWARD WATTS

*Long Island Lighting Co.
Mineola, N. Y.*

Insurance plans a must for risks of mutual aid



Damage at the Bank Street Bridge in Waterbury included destroyed houses and broken gas mains and railroad tracks

One of the unique attributes of the utility industry is its willingness to lend a hand in time of need. When disaster strikes one of its members, a few telephone calls to neighboring companies start into motion a wealth of trained personnel, vital equipment and materials to expedite the restoration of service in the stricken area in the shortest possible period of time.

In the gas industry, fires, floods or other catastrophes may sometimes cause serious interruptions in service. Prompt restoration is often speeded by this traditional spirit of cooperation.

During recent years, there have been numerous instances of such assistance. Many utilities, victims of unforeseeable and unfortunate happenings, have learned first hand how vital the help of a neighboring company can be in facilitating the most expeditious restoration of service which is so essential to the maintenance and preservation of good public relations and in keeping loss of earnings at a minimum.

The 1955 floods in New England and the serious fire of the Portland Gas & Coke Company (now the Northwest Natural Gas Company) in 1956 are just two out of many notable examples of the need for outside help and the response of neighboring utilities. Some 400 men from utilities in Oregon, Washington, Utah, California, Arizona and British Columbia were flown into the Portland area. So effective was this help that an insurance report of the incident contained this comment: "It might be of interest to note that if the gas company had not brought in the extra manpower to facilitate the turning off and turning on of their gas service, it would have taken almost seven months to accomplish the job by using only their regular service crew. It was calculated that by the payment of expediting expenses exceeding \$400,000 the potential loss was reduced to this amount from approximately \$3,000,000."

In Connecticut, where floods follow-

compelled to aid Connecticut Light & Power in restoring gas service

ing the hurricane of August, 1955 caused such widespread destruction, the problems of restoration were tremendous. Speaking of the assistance received from the outside, the Connecticut Light & Power Company in its report of the catastrophe stated: "To help with the task (of restoration) neighboring utilities generously provided experienced crews. These, and others hired for the emergency, worked side by side with Connecticut Light & Power employees rushed from less seriously affected company districts. At the peak of restoration work, about 2,000 men were on the job in Waterbury alone. To assist in turning on gas meters, 450 trained service men from Consolidated Edison Company of New York were called in. Their aid enabled virtually complete restoration of service by Labor Day weekend."

These are merely two instances of what has happened in the past and what, without warning, may happen again. They are cited here not to emphasize the extent of damage, but to stress the value and importance of neighborly assistance at such times.

This good neighbor policy is not, of course, a recent innovation in the gas industry. It has typified relationships for many years but the recent frequency of hurricanes along the eastern seaboard brought into sharp focus the extreme value of such assistance and stimulated attempts to plan this help in advance.

As a result there began to evolve various formal and informal arrangements and commitments regarding the availability of men and equipment. The Mutual Assistance Emergency Plan of the New England Gas Association is a typical example of such preplanning designed to eliminate, as far as possible, the confusion, delay and misunderstanding which can so easily develop once a catastrophe has occurred.

Most of the preplanning up to this time has been concerned primarily—and naturally—with the number of men or crews, type and quantity of equipment, reimbursement for wages, and similar matters. Apparently, little thought has been given to another area which could not only prove troublesome but which might, without prior agreement, conceivably dampen the very spirit which promotes mutual assistance.



An employee clears debris threatening a temporary gas main in Winsted as waters rise again



This large pile of debris at the South Gas Plant is testimony to the severity of the Connecticut flood



A fleet of taxicabs (above) was enlisted to transport maintenance crews on their service rounds. School buses, too, shuffled the repairmen (below) to the flooded areas





An employee attempts to salvage and protect the valuable equipment at the Willimantic Gas Plant, which was under several feet of water



Maintenance crews (above) repair Norwalk gas mains broken by serious washout. A customer (below) thanks a serviceman for turning on gas



The Insurance Committee of A. G. A. has for some time been concerned over the potential liability involved in this lending of men and equipment. Large losses might have a stifling effect on the entire mutual assistance idea if there is not some clear understanding in advance as to which company should assume the burden. On the west coast, as many as 55 men in one chartered plane were flown to the aid of a neighboring utility. The trip was made without incident but had it crashed, compensation claims alone might easily have exceeded a million dollars.

Few companies can lightly consider losses of this size. If a catastrophe had occurred and the lending company, in the absence of any clear understanding, were left to absorb the loss itself, enthusiasm for being a Good Samaritan in the future would be dampened and impaired rather than promoted.

We believe this should not happen. To avert misunderstandings, the Insurance Committee feels that any company prepared to supply or borrow men, equipment and/or materials in times of emergency, should recognize and be prepared for the possible liabilities involved.

There seems to be general acceptance of the theory that the borrowing company should be responsible for all expenses incurred by the lender, so long as they are incurred by the lending company acting at the request of, or for the benefit of, the borrower. As a matter of fact, the assistance rendered by one utility to another up to this time seems to have been predicated upon this premise but little thought has been given to costs resulting from liability and compensation claims. These costs can outstrip all others combined and can be of serious consequence.

In thinking about this problem and searching for an acceptable solution, the Insurance Committee at one time felt that some uniform or standard agreement could be drafted for use by the industry as a whole. Closer analysis of the many problems involved, however, indicates that this approach, except on a regional basis, would be impractical. To cite but one problem, the many variations in statutory requirements of Workmen's Compensation laws in the various states make it practically impossible to set down a recommendation which would adequately encompass all

(Continued on page 31)

Electronics seminar stresses computers

Seminar was conducted jointly by Ray E. Harbaugh, who represented Edison Electric Institute, and John Towle, who represented A. G. A.

The expanding role of electronic computers in public utility operations was impressively revealed in presentations made at the seventh annual Public Utility Electronics Seminar, held in San Francisco November 30th-December 2nd, 1959.

The 1959 seminar was sponsored jointly by the A. G. A. Accounting Section and the Edison Electric Institute Accounting Division, in cooperation with the Pacific Coast Gas Association and the Pacific Coast Electrical Association, Inc.

The seminar was conducted under the joint chairmanship of John Towle, A. G. A. chairman, and Ray E. Harbaugh, EEI chairman, of the A. G. A.-EEI Electronic Accounting Machine Developments Committees.

L. W. Coughlan, comptroller, Pacific Gas and Electric Co., welcomed the delegates to the West Coast. J. Gordon Ross, past chairman of the A. G. A. Accounting Section, opened the seminar by stressing the importance of maintaining good customer relations in every computer installation project.

General sessions on Monday were devoted to a presentation of new hardware developments, by members of the Electronics Committee who maintain liaison with various equipment manufacturers.

The equipment reviewed included "second generation" computers, character sensing machines, and other input-output devices.

The morning session covered developments at Addressograph-Multigraph, presented by C. D. Otcsek; Burroughs-Electrodata, presented by J. W. Vanier; Datamatic, by F. F. Beisel; Farrington-IMR, by J. A. Hogg; General Electric,



Speakers on "Techniques for Reducing Programming Effort" (l. to r.): Leo Peck, Dexter Stoner, A. S. Reck, moderator, and E. D. Cowles



"Organization and Administration of EDP" was discussed by (l. to r.) H. E. Steiner, J. W. Vanier, F. F. Beisel, W. J. Ott, and J. A. Comerford



Speakers who took part in the Accounting Section meeting included (l. to r., seated) W. C. DeNeane, J. P. Bromley, Dave Keller, Melton Meadows, and W. J. Ott; and (l. to r., standing) James Harrison, F. F. Beisel, J. G. Cadby, C. D. Otcasek, J. W. Vanier, and H. E. Mueller



Participants in the Public Utility Electronics Seminar included (l. to r., seated) J. Gordon Ross, R. E. Harbaugh, L. W. Coughlan, J. E. Towle, and Dexter Stoner; and (l. to r., standing) F. F. Beisel, C. D. Otcasek, Devere Cowles, J. A. Hogg, J. W. Vanier, and J. W. Baker

by D. Stoner; and Philco, by E. D. Cowles. J. W. Balet of Consolidated Edison Co. completed the morning session by showing a training film on "Modernized Electronic Accounting" and discussing the history of data processing in Consolidated Edison.

Monday's afternoon session covered further equipment innovations.

J. A. Comerford reported on developments at International Business Machines. C. Marchyshyn covered National Cash Register. H. E. Steiner reviewed R.C.A., R. Van Wuyckhuysen discussed Recordak, R. E. Ellifritz reported on Remington Rand, and W. J. Ott covered Standard Register. The afternoon session concluded with another electronic training film entitled "Your Service Bill," shown by J. P. Bromley of the Consumers Power Company.

Tuesday's sessions were divided into six informal panel discussions. By having two groups of three panels each held in the morning and repeating the panels in the afternoon, it was possible for each delegate to attend four of the six meetings.

The first panel covered "Systems Survey and Design Prior to Programming." Dexter Stoner of Pacific Gas and Electric Co., R. E. Hanington of Philadelphia Electric Co., D. P. Landry of Pacific Power and Light Co., R. C. McCollum of The Peoples Gas Light and Coke Co., and the moderator, R. E.

Ellifritz of Columbus and Southern Ohio Electric Co., covered the subject from the standpoint of both actual and potential users.

In another panel, E. D. Cowles of Detroit Edison Co., C. J. Williams of Niagara Mohawk Power Corp., L. C. Hughes of Pacific Gas and Electric Co., C. Marchyshyn of West Penn Power Co., and the moderator, J. S. Burchell of New Jersey Power and Light Co., discussed the subject of "Information Transfer and Re-entry Techniques" as applied in their respective companies.

The subject "Data Processing in Medium Size Companies" was presented by a panel composed of J. A. Hogg, Atlantic City Electric Co., D. Essig, Citizens Gas and Coke Utility, M. G. Meadows, Laclede Gas Co., W. C. DeNeane, Washington Gas Light Co., and the moderator, J. G. Cadby of Wisconsin Electric Power Co. F. F. Beisel of the Pennsylvania Power and Light Co. moderated a panel on "Organization and Administration of EDP." The panel members were W. J. Ott of Cincinnati Gas and Electric Co., J. A. Comerford of Consolidated Edison Co., H. E. Steiner of Niagara Mohawk Power Corp., and J. W. Vanier of the Southern California Gas Co.

"Techniques for Reducing Programming Effort" was the subject discussed by a panel of E. D. Cowles of Detroit Edison Co., Dexter Stoner of Pacific Gas and Electric Co., Leo Peck of Con-

sumers Power Co., and the moderator, A. S. Reck of Union Electric Co.

The final panel was composed of D. W. Keller, Columbia Gas System; C. D. Otcasek, The East Ohio Gas Co.; H. R. Lenz, Philadelphia Electric Co.; O. T. Johnson, Southern California Edison Co.; plus the panel moderator R. Van Wuyckhuysen of Rochester Gas and Electric Corp., and covered the subject "Justifying the Installation of a Computer."

The Tuesday sessions were climaxed by a visit of delegates to the new 705 Data Processing Center of the Pacific Gas and Electric Company.

The General Session on Wednesday centered around the theme, "what we are doing with electronic computers." Company representatives discussed the latest developments in their installations and reviewed plans for the future.

The first group of companies reported on their existing tape computer systems. The Citizens Gas and Coke Utility installation was reviewed by Don Essig. J. A. Comerford covered developments at Consolidated Edison Co.; and A. J. Gebauer discussed computer progress at Detroit Edison Co. Developments at Pacific Gas and Electric Co. were covered by Roy Dreiman; and Pacific Power and Light Co. operations were reviewed by D. P. Landry. Since certain utilities were unable to send representatives, their stories were summarized by other

(Continued on page 32)

*Underestimating future revenues
can prevent profitable main extensions*

Are new main cost studies reliable?

By DANIEL PARSON

Director, A. G. A. Bureau of Statistics

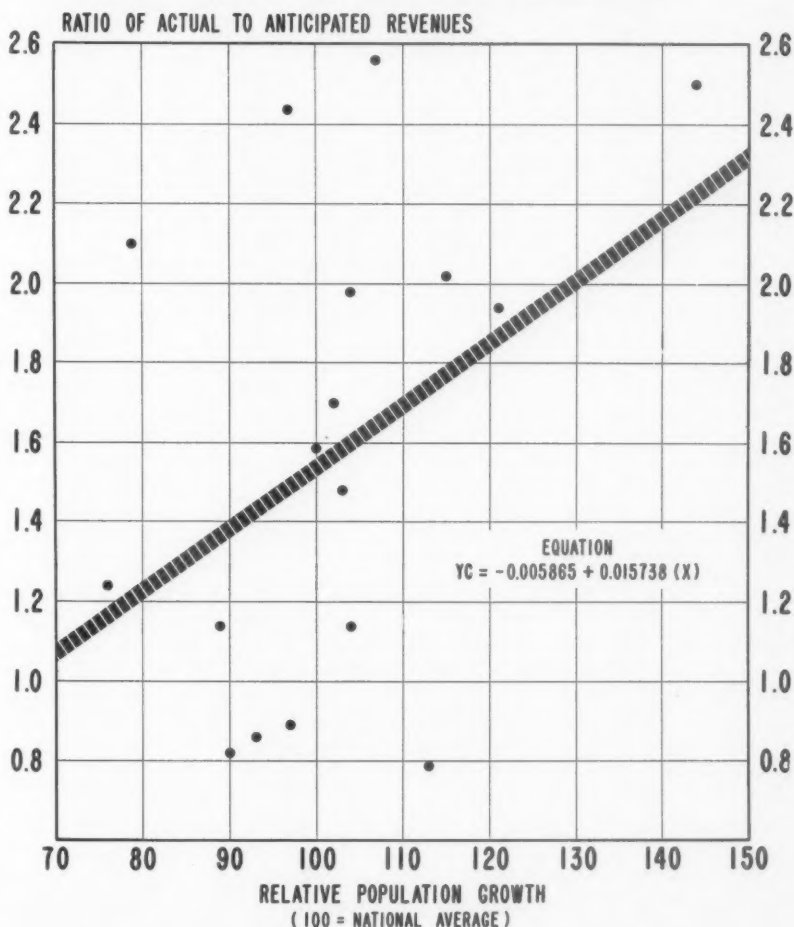
THE BUREAU OF STATISTICS of the American Gas Association, under the auspices of the A. G. A. Rate Committee and with the cooperation of the A. G. A. Committee on Economics, in 1959 initiated a study of the reliability of cost, customer and revenue estimates upon which main extensions approvals are based. The purposes of this study were four-fold:

1. To determine the accuracy of such estimates.
2. To determine the significance of any under-estimation of the revenue-investment relationship with the implication that such under-estimation might result in the possible refusal to construct free main extensions which would ultimately have proven profitable.
3. To provide some quantitative basis for adjusting revenue estimates, so that more reasonable decisions regarding free main extensions would be facilitated.
4. To alert management to the advantages of undertaking this type of research.

Many gas companies determine the amount of money which they will spend on main extensions before requiring payment from consumers, based on some multiple of anticipated revenues, intended to preserve some relationship with estimated cost. (Other companies utilize free footage allowances as a basis for decision; these are really only a convenient way of expressing dollar allowances in a manner more readily applicable to individual extension circumstances, which has the effect of averaging high cost/foot and low cost/foot extensions.) Frequently these revenues are estimated in terms of those expected shortly after completion of the extension, and inadequate consideration is accorded to revenues which will be obtained in future years through the gradual attachment of additional customers along the extension.

Because of this fact, it seems possible that

RELATIONSHIP BETWEEN POPULATION GROWTH AND REVENUE GROWTH ON NEW MAIN EXTENSIONS



ESTIMATED AND ACTUAL COSTS, CUSTOMERS, AND REVENUES FOR A SAMPLE GROUP OF MAIN EXTENSIONS

Company No.	Estimated at Approval			Actual, 4-5 Years Later			Number of Extensions	Proportion of Extensions Where Actual Exceeds Estimate		Proportion of Extensions Where Estimate Exceeds Actual	
	Costs	Customers	Revenues	Costs	Customers	Revenues		Customers	Revenues	Customers	Revenues
1	\$ 79,847	713	\$ 70,375	\$ 64,576	925	\$ 111,672	84	64%	69%	18%	15%
2	47,207	176	32,383	39,697	231	47,790	19	68	100	0	0
3	43,095	785	49,945	36,173	493	56,715	14	7	64	93	36
4	98,740	240	30,119	72,105	182	23,698	20	20	35	50	65
5	557,825	2,435	329,255	606,779	1,668	293,548	13	38	84	62	16
6	335,588	1,651	111,640	293,421	1,750	226,906	20	60	85	40	15
7	10,435	34	5,808	10,018	78	9,912	3	100	100	0	0
8	4,246	44	3,858	4,039	76	8,134	18	56	94	0	6
9	4,773	12	1,904	3,681	13	1,569	4	75	25	25	75
10	189,024	342	36,627	160,696	358	45,325	9	67	100	33	0
11	185,802	361	28,684	158,074	483	70,034	118	48	78	10	21
12	12,930	78	14,480	11,524	137	28,773	2	100	100	0	0
13	11,972	63	3,198	11,311	100	7,988	5	80	100	20	0
14	77,856	309	17,194	85,230	436	33,441	20	85	100	0	0
15	142,166	310	67,482	133,655	253	58,477	15	6	20	87	80
Total	\$1,801,506	7,553	\$802,952	\$1,690,979	7,183	\$1,023,982	364	53%	78%	23%	22%

in many instances main extensions which over the long-term physical life of the plant would have proven profitable, have not been constructed (where customers were unwilling to pay the excess cost) because of this limited outlook toward revenues obtainable from the extension. Furthermore, unwillingness to assume a certain degree of business risk in constructing such extensions results in the system being circumscribed in its subsequent expansion, with resultant greater difficulty in reaching large new and profitable housing developments constructed in later years further away from the central core of the utility system.

A few companies using anticipated revenue as a basis for decision have translated this into present value. This technique permits comparison of estimated current costs with estimated current value of a series of future revenue payments; having both factors expressed at the same point in time increases the validity of the comparison.

Another refinement occasionally used is to base decisions, not on anticipated gross revenue, but on expected net revenue (gross revenue minus cost of gas). This technique permits extension decisions in which profitability will not be seemingly affected during the long-term period of use of the extension, by changes in gas cost (and offsetting rate increases), thus providing a greater stability to the future revenue estimates upon which extension decisions are based.

To determine the extent of inaccurate revenue and customer estimation, at time of decision regarding construction of main extensions, a letter was sent to all gas distributing member companies of A. G. A., asking them to analyze, for a representative sample of extensions constructed four or five years earlier, the estimated cost at time of approval, and the anticipated customers and revenues upon which approval of the extension was based. Also to be provided were the actual cost, and the actual customers and revenues in the most recent year. By this procedure, it was hoped that aggregate comparisons could be made between actual and anticipated customers and

revenues, as well as between actual and estimated revenue per dollar of investment.

Responses were received to these inquiries from 43 gas companies with 15 of these submitting data sufficiently complete for use in the tabulations, and five submitting partial data.

It was recognized that comparisons between estimated customers and revenues and those actually achieved are dependent to some degree not only upon the realism inherent in the estimates, but also on the rate of population and household growth within the service area. To provide a visual impression of this latter relationship there is appended a chart which shows the relationship of population growth (expressed as a relative increase compared to the national rate of increase) with the ratio of actual revenue divided by anticipated revenue. It is evident that there is a linear relationship although substantial scatter exists about the line which mathematically describes the relationship. The multiplier or factor used to modify revenue anticipations increases as the rate of population gain increases.

Among the 15 companies which supplied complete information on estimated and actual cost, the aggregate estimates were higher than the actual in 13 instances. On the basis of individual extensions, the cost estimates were overstated (as compared to actual costs) for 72 per cent of the extensions. This undoubtedly reflects a certain degree of conservatism on the part of companies, wishing to be sure that construction budgets are adequate to meet the purposes for which intended, but where the relationship of revenue to cost is guiding in determining whether an extension should be constructed, this type of conservatism tends unnecessarily to restrict growth opportunities.

With respect to revenue estimates, for the 15 companies providing complete data on both anticipated and actual, the aggregate actual was higher than the estimate in 11 instances. Actual revenues exceeded anticipated revenues by 28 per cent on the average, while actual revenues exceeded anticipated revenues for 78 per cent of the individual extensions.

With regard to customer estimates, 53 per cent of the extensions had a higher number of actual customers than anticipated; only 23 per cent had fewer than expected; for the remainder, actual customers were essentially the same as anticipated at time of approval.

Appended is a table setting forth these results in further detail.

For the entire group of companies, it was estimated at the time of approval that cost would be 2.24 times revenue. The actual ratio, 4 to 5 years after construction, was only 1.65. It is thus apparent that if these companies were willing to construct extensions on the basis of a 2.24 relationship then they could have spent nearly 35 per cent more on free main extensions, and achieved within a few years the result which they desired. (This, of course, does not correct for the problem of inadequate return during the initial years, before the load matures in the fourth or fifth year; some consideration of this problem might be necessary depending upon the individual company's over all rate of return.) This would have resulted in making gas service available to substantial additional numbers of customers, and might have provided a more economic distribution system base upon which to extend service to other subsequent housing developments located farther out in the suburbs.

On the other hand, it is conceivable that some companies are willing to spend 2.24 times revenues only because they expect subsequent improvement in the ratio, and without such improvement the extension would be considered unprofitable. It should also be kept in mind that the investment figures quoted in this report omit any "upstream" costs necessitated by the extension; i.e., main strengthening, new gas purchases at possibly higher unit costs.

It nevertheless appears that many gas utilities are inadequately evaluating the revenue impact of future growth in areas served by new main extensions, and that extension policies, to this extent, may be unduly conservative and restrictive.

Symposiums sell to industry



Textile symposium speakers, from left: W. H. Hindle, E. C. Hunte, H. S. Walker, Jr., H. M. Rogers, H. B. Riehl, J. W. Powischill



An attentive audience of invited industry executives from the area hear speakers at a joint A. G. A.-Paper Industry symposium

By EVERETT VK. SCHUTT

*Central Hudson Gas & Electric Corp.
Poughkeepsie, N. Y.*

Uncovering the prospect and preselling him is perhaps one of the most difficult jobs in salesmanship. Any good salesman can be competent when sitting across the desk making the final sales pitch to a prospective customer. However, finding that customer and influencing him to a favorable bias is a far harder task.

In industrial selling this becomes even harder. Our prospects are not to be found everywhere; in most cases they are professionals with a natural professional reserve, and are difficult to reach.

To facilitate the reaching of prospects on a mass scale the committees of the Industrial and Commercial Gas Section have tried a different approach to industrial promotion. By cooperating with the professional societies or trade groups of our customers in a given industry

they have either participated on the programs of these organizations or set up independent meetings for specific industry groups.

Two of these meetings were the Textile Processing Symposium held at Sedgefield Inn, Greensboro, N. C., on September 28 and 29, and the Paper Industry Heating and Drying Symposium held in Middletown, Ohio, on September 15.

Total customer attendance at these symposiums exceeded 250. By gathering such a large number of customers into one hall to hear a good industry story, these symposiums achieved simultaneously the jobs of prospecting and of preselling the prospect for the member companies in the areas.

The conduct of these symposiums falls under what a sales psychologist might call formalized selling.

The operation of this type of industrial promotion has been reduced to a formula. There are certain ingredients which we know will build success. The

problem is one of group selling. By this we mean the sale of an idea or an image to a group of people all at one time. The technique might be referred to as one of wants-satisfaction.

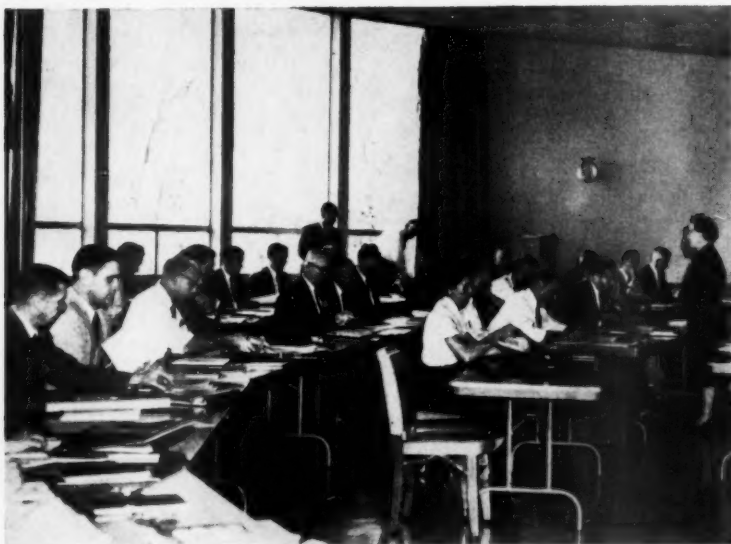
From the experience of the committee these are the basic elements which must go into making up a successful meeting of this kind:

1) The symposium should be held in a location with a large concentration of the industry or specific audience you are trying to reach. It is unreasonable to assume that your potential audience will travel great distances and spend considerable sums to attend your meeting until it has built up a national prestige. At the same time it has been found profitable to hold the meetings in an area with some tourist attraction. In our own experience this has not proven detrimental to attendance at the sessions.

2) The invitation extended to your potential audience should be both formal and cordial; an attractive program

(Continued on page 31)

Kitchen planning seminar sharpens a new sales tool



Commercial Kitchen Planning Seminar, held at Michigan State University under sponsorship of Industrial & Commercial Gas Section, had capacity enrollment

Ten years ago the Philadelphia Gas Works Division of The United Gas Improvement Co. employed for the first time the professional services of a food facility planning consultant.

Since then, this move on the part of The Philadelphia Gas Works has been vindicated in the form of national awards, letters of appreciation, words of praise, better customer relations, strong support from dealers and especially low sales losses to competition.

The success of the Philadelphia Gas Works program has led other companies to employ kitchen planning consultants for the same purpose. Nevertheless, this successful sales technique is relatively unemployed in our industry.

For some time the Industrial and Commercial Gas Section's Food Service Committee has urged that something be done to encourage a more active use of kitchen planning consultants as a commercial customer service. Toward this end the Section held for the first time a Commercial Kitchen Planning Seminar, November 9 through 13, 1959, at Michigan State University in East Lansing, Mich.

The five-day school program was not

(This article was prepared by the staff of the A. G. A. Industrial & Commercial Gas Section.)

designed to make professional food service consultants out of commercial gas salesmen, but it did provide an understanding of planning problems, a knowledge of the language and nomenclature used in connection with commercial kitchens, and a sufficient knowledge to encourage further on-the-job development for the planning of simple kitchen layouts. The seminar was attended by 441 people—the maximum number that university officials were willing to handle.

The program was planned to lead the student gradually through the development of a sample kitchen plan. For instance, both lecture and laboratory time was spent on the planning of a food service operation. The students were informed that the first step in planning a food service operation is the determination of the right merchandising policy. The lesson included the important considerations necessary in determining a merchandising policy and outlined the job of the consultant in aiding the owner or operator to arrive at a satisfactory policy.

Instruction at the school showed the importance of a proper flow of materials from receiving through customer service, and each student in his laboratory sessions blocked out on his sample plans the primary functional areas of a food

service establishment.

Before translating an idea into a working plan the students benefited from a discussion of the primary functions performed in various types of food service establishments. They had the opportunity to relate equipment and personnel needs to the various functions. Special emphasis was placed on the advantages of modern labor-saving equipment and the ways in which these advantages can be nullified by inefficient placement, poor maintenance or failure to understand the basic scientific principles by which the equipment operates. The seminar also included sessions on specialized and material handling equipment.

As each student developed his own plan during the week he was given the benefit of critical analysis by each of the three instructors who appeared daily during the seminar.

Instruction was not limited to that given by the university staff. Industry speakers were called in to give lectures on commercial kitchen ventilation, commercial water heating, dishwashing and incineration. Of special interest to the students at the seminar were the two hours devoted to commercial kitchen ventilation. This subject, important from a competitive point of view, was given comprehensive treatment. Covered were the basic factors determining required capacity for fans installed as a part of a kitchen exhaust system, and the effect of gas and electric cooking appliances on the ventilating and air conditioning requirements.

The seminar was conducted by the Continuing Education service of the university at special facilities in Kellogg Center. Excellent hotel accommodations at the rate of \$7.00 per person were provided, and the classrooms were made available within the same building.

So well received was this first seminar by those attending that the Industrial and Commercial Gas Section plans to sponsor a second seminar at Michigan State University October 24 through 29, 1960. Since the registration again will be limited, those companies interested in sending students should address requests now to the Section's secretary.

For those interested in how a food facility planning consultant can effect

(Continued on page 32)



Attractive price for Gold Star Award top-quality ranges was considered biggest asset by company's sales manager



South Jersey's promotion featured a 'mystery shopper' who visited salesrooms, gave prizes to Gold Star-wise salesmen



SOUTH JERSEY

Mobilizing all its forces for a Gold Star Award range sales campaign, the South Jersey Gas Co. presented an exciting promotional package in its show staged for 300 dealers

Ideas add glitter to Gold Star

Everything needed to promote, sell and make a profit was offered to South Jersey Gas Company's gas appliance dealers during this company's Gold Star Award range campaign, the most vigorous promotion this dynamic southern New Jersey utility has yet attempted.

Using professional models, along with members of the company's sales staff, South Jersey Gas unveiled the entire Gold Star promotional package before more than 300 of the company's gas appliance dealers and their salesmen at a dealer show in Atlantic City. Dinner, cocktails, the Gold Star Revue film and a full scale floor show brought in from New York City supported presen-

tation of the company's promotion plan.

Dealers were told of the outstanding profit opportunities available for vigorous participants. Here are some of the sales aids and incentives offered:

- Free promotion kit, including exciting display materials.
- 33⅓ per cent advertising and promotion allowance for newspapers and radio.
- Customer financing on retail sales with no money down and 3½ years to pay.
- A cash bonus paid for sales of all gas appliances.
- Window or interior display contest with cash prizes.

• Cash bonus paid to all dealers and salesmen for each sale of a Gold Star Range during campaign.

• Cash bonus for dealers maintaining live demonstrations of a connected Gold Star Range for six weeks.

• A mystery shopper to visit dealers' stores during the Gold Star Range promotion and give cash prizes to those who show that they know the Gold Star story.

• A traffic building cooking show to be scheduled exclusively for any dealer, complete with 50-50 cooperative advertising, Gold Star napkins and bottle-top give-aways, direct mail pieces with dealer's imprint, banners, displays and



OKLAHOMA

Decorative gold stars did double duty during Oklahoma Natural's Old Stove Round-up. Not only did they serve to dramatize the Gold Star campaign, but on the back of each paper star was printed a feature of Gold Star ranges, a ready reminder for salesmen

a home service adviser to cook and bake.

South Jersey Gas Company, which also merchandises gas appliances through a full staff of salesmen, scheduled over 200 newspaper ads, 950 radio spots, 65,000 direct mail pieces, bus and truck signs and postage imprints to saturate its 2,000-square-mile, 79-municipality service area with the Gold Star story and pre-sell its customers.

According to E. E. Stuenkel, sales promotion and advertising manager, the biggest asset to this promotion is the \$199.95 retail price made available to customers for Gold Star ranges.

"Never before has such a high quality range been offered at such a low price. The cooperation of many outstanding range manufacturers has made this possible," Mr. Stuenkel says.

In addition to this promotional deluge and dealer effort, South Jersey Gas also supported its own sales program with meetings, motion pictures and skits for its sales personnel, at which they were offered bonuses, prizes and other sales incentives. A full scale display program throughout all the offices of the company's three divisions was instituted.

The 11-week campaign produced 626 gas range sales, of which 41 per cent were Gold Star Award ranges. Dealers accounted for 310 range sales, of which 21 per cent were Gold Star. Of retail units sold by South Jersey salesmen, 63 per cent were Gold Star.

These results, though perhaps not im-

pressive by large company standards, were regarded as presenting a very favorable record for this utility, and for the Gold Star Award promotion.

A "Gold Star" sales tool conceived by an Oklahoma City dealer contact man, Tom Warner, was a vital factor in one of Oklahoma Natural Gas Company's most successful gas range campaigns, this company reports.

In calling on dealers, Warner noticed that many appliance salesmen in Oklahoma Natural's Oklahoma City district were not taking the time to learn what they should know about the various exclusive features of a modern gas range. As a result, sales were being missed on top-of-the-line models.

To stimulate the sales of top model gas ranges in connection with the company's Old Stove Round-Up Campaign, Warner devised a set of twelve five-inch gold stars. On one side of each gold star, in blue lettering, a different quality feature of a gold star gas range was presented. In larger letters on the other side of the star were the words, "Gas Ranges." The stars could be hung by a string or fastened with scotch tape to the particular area or feature of the range mentioned on the star.

Five hundred sets of the stars were distributed by Oklahoma Natural sales representatives to gas appliance dealers in the Oklahoma City District. Imme-

diately acceptance and approval were shown by dealers and their salesmen.

The gold stars helped to boost the sales of Gold Star ranges by:

1. Assisting the salesmen to prepare in advance a sales story about the feature shown on each of the twelve stars.
2. Reminding the salesman of Gold Star range features which he might otherwise overlook in the sales presentation.
3. Creating attention of floor traffic to gold stars attached to the range.
4. Giving display material in connection with range campaign.
5. Providing salesmen with a sales tool which could be used effectively after the close of the range campaign.

Enthusiasm for the features shown on the gold star is shown by the following statements made by Oklahoma City dealers:

"Several persons passing through the store stopped and looked at the gold stars used to decorate a range on the sales floor. Two persons immediately commented on the stars and stopped to read the copy."

(This dealer sold a Gold Star range to one of the two persons, Oklahoma Natural reports, and he firmly believes that had it not been for the gold stars on the range he would not have had the opportunity to make a sales presenta-

(Continued on page 33)

Hollywood

(Continued from page 9)

of this handsome all-gas kitchen.

And now, the Bureau has already begun negotiations for the gas industry's 1960 promotion, starring the inimitable Bob Hope.

A run-down on other activities of the Hollywood Bureau shows that its gas appliance sales to key movie and TV personnel totaled a value of \$12,400 in 1959. For the ninth year, the Hollywood Bureau's "Pictures of the Month" with

caption cards were released to subscribers. These publicity photos feature gas appliances with such stars as Alan Ladd, Betsy Palmer, Doris Day, Jack Lemmon and June Allyson. A total of 208 other publicity pictures with stories or captions were released to manufacturers, member gas companies and association and trade magazines.

Advertising photographs, instructions and story synopsis on each "Playhouse 90" show were prepared and mailed by the Bureau to all TV subscribers during 1959, including summer rerun shows.

As part of A. G. A.'s Field Program, the Bureau worked with all P.C.G.A. utilities on PAR Programs, with emphasis on Gold Star. Presentations also were made to West Coast range manufacturers, and over regional live TV.

The Bureau is off to a running start for 1960, with Jayne Mansfield posing by the new Norge gas refrigerator as an early attraction. And when they can find some up-to-date cowboys, they'll even have modern gas appliances in the old corral!

Mutual assistance

(Continued from page 22)

situations.

In lieu of any standardized industry-wide agreement, the Insurance Committee concluded that each member company of A. G. A., whether or not it is an active participant in a Mutual Assistance pool or agreement, should analyze the risks involved in lending or borrowing men and/or equipment and should:

1. Determine whether the borrower, lender or both should be responsible for liability, compensation and property damage losses, as well as accidents which could detrimentally af-

fect group insurance costs of the lending company.

2. Work out a mutually acceptable basis for arriving at the value of losses. In property damage losses and third party liability cases, if such should develop, a determination of the amount of indemnity should not be too difficult. In the case of compensable injuries, however, there may be problems because of the relatively long period of time in many cases between the incident and a determination of its ultimate cost.

3. Satisfy itself concerning the adequacy of its own insurance program to cover the added liabilities which might be assumed by this activity.

4. Outline areas for which special in-

surance coverage might be required and take such preliminary steps as are necessary to facilitate the placing of the risk when and if necessary.

It would seem desirable in those areas where either agreements or plans of operations have already been devised, to expand them to include some statement or policy concerning liability and compensation losses.

Certainly each company should recognize the possibilities involved and work out a plan to resolve the problems which may arise. Enlightened and serious advance preparation will do much to guarantee a continuance and expansion of Mutual Assistance, a most commendable facet of our industry.

Symposium

(Continued from page 27)

should be printed listing all of the speakers and a summary of the content of their talks. In planning a program for a meeting of this kind it has been found advisable to caution our own industry speakers to use the soft sell approach and to make their presentations as informative as possible. At the same time, judicious use should be made of speakers from the industry you are attracting. For instance, at our Textile Processing Symposium we had speakers on the platform from the American Cyanamid Company, Clemson College School of Textiles, and from a prominent consulting engineering firm in the field. At the Paper Symposium we used a university speaker who is a foremost authority in the field of paper drying.

The purpose for employing a mixture of speakers is to facilitate identification of the audience with the men appearing on the program. In all likelihood your customer audience will not know beforehand any, or many, of the gas industry speakers. At the same time, they will be more likely to have knowledge of their own industry people and the firms they represent.

- 3) In direct mail selling the effectiveness of your program is only as good as the mail-

ing list you use. Similarly, the success of your meeting will only be as good as the invitation list you have on hand. For the Textile Processing Symposium, which has run annually for the past three years, the Section has compiled a mailing list of over one thousand Addressograph plates of textile industry people. The last was compiled through the cooperation of gas company members and textile trade associations. The invitations are sent with an R.S.V.P. card in order to encourage the recipient to commit himself to attendance at the symposium while he has the dates of the meeting before him. Usually the invitations are sent about a month and a half in advance of the symposium, allowing sufficient time for plans to be made.

- 4) To encourage attendance, pre-symposium publicity is secured in industry trade journals. For instance, in the textile industry the symposium was announced in *Textile World*, *Textile Reporter*, and *Textile Industries*. The Paper Symposium was actively supported by TAPPI in its Ohio section magazine and in special releases. We have found that we have received increasing cooperation from the trade publications on publicity as our annual meetings have gained in prestige.

- 5) Perhaps the most important contributing factor to a good attendance at any of these meetings is a personal follow-up on as many of the written invitations as possible. Mem-

ber companies in the area of the meeting must be advised when the invitations are mailed out, and they in turn should follow up each invitation with a personal call and extend a second invitation on the part of their company.

- 6) The length of the program also is critical. It has not been found feasible to continue any of these meetings longer than a day and a half, and it has not been found wise to cooperate with another association in planning a program longer than one day. It must be recognized that professional people attending such meetings find it almost impossible to remain away from their jobs for an extended length of time.

What does such a meeting cost the gas utilities who participate?

- a. At the Textile Symposium all representatives and guests paid their own expenses. The majority of those present were from the Carolinas, although some came from New England and the deep South.

- b. The gas utilities held a complimentary luncheon and a friendship hour the first night at a total cost of approximately \$1,000. This sum, plus a few small incidental expenses, was allocated to the participating gas companies on the basis of attendance by textile firms from their respective service areas. The cost was small considering the benefits derived—exchange of ideas, new friend-

ships, improved relationships between manufacturer and customer, thought-provoking opinions elicited by open discussion, and solution of many problems on the spot by experts.

These are the ingredients, we have found, that go to make up a successful industrial promotion of this kind. We believe these meetings have been successful.

To back up these statements are the many letters of commendation which we have received from the companies who were represented at these meetings.

One company cooperating with us in the Textile Symposium reports: "We feel that we have built confidence in our men and our

industry, and our spirit of cooperation has had its effect not only on the customer but also on the equipment supplier, the burner manufacturer and the textile educator."

Not only did we reach in 1959 more than 250 of our customers with a full day program on gas as applied in their plants, but we received extended mileage from publicity and reporting in the trade journals that would have cost us over \$10,000 had we purchased this as advertising space.

In addition, these meetings have been well received by both the textile and paper industries. We will hold another meeting for the Textile Industry in 1960. By invitation,

we will also prepare a two-hour presentation before the Engineering Conference of the Technical Association of the Pulp and Paper Industry and three individual programs for various of their sectional meetings throughout the country this year.

The Section's committees are extremely hopeful that they can carry on similar programs with other industries served by our member companies.

If interested in preparing a similar program prepared for an industry in your area, we suggest that you contact the Secretary of the Industrial and Commercial Gas Section at A. G. A. for assistance.

Facts and Figures

(Continued from page 19)

of privately financed new home starts was 1,210,000 for November 1959, according to the Bureau of Labor Statistics. Actual housing starts during November 1959 totaled 92,300, a decrease of 15.6 per cent from the November 1958 starts. Industry officials claimed

that the reason for drop was the scarcity of mortgage money. During the first 11 months of 1959, 1,294,000 homes were built. Housing officials estimate that a total of 1,350,000 will have been started in all 12 months of 1959.

Shipments of gas-fired central heating equipment during November 1959 totaled 112,500 units, a gain of 7.2 per cent over November 1958. Gas range

shipments, up 1.4 per cent in November 1959 totaled 173,500 units. Shipments of gas dryers continued to show substantial gains: 58,260 units were shipped during November 1959, an increase of 33.9 per cent over November 1958. Water heater shipments declined 2.3 per cent in November 1959; but for the first 11 months of 1959, they aggregated 2,756,400 units.

Seminar

(Continued from page 28)

tively be employed, the following remarks by John F. McGuckin, general sales manager of the Philadelphia Gas Works Division, U.G.I., sum up how this company has successfully used such a man:

"Our salesmen offer the services of our consultant as an added gas company extra, which has proven to be one of the best soft sell techniques we use. Our service does not eliminate the need for private consultants as evidenced in the 10-year period by three private agencies, who were aware of our

program, coming to Philadelphia to offer Food Service Equipment consultation. We work closely with these agencies. They are better able to do large jobs, and we are better able to do small jobs, so that the entire market is covered. We compare notes on new jobs, and we have, in every case, been able to avoid duplication of effort and conflict.

"In operation, our program goes into effect when a customer, through his gas company representative or kitchen equipment dealer, originates a request. We prepare drawings which then go to the dealer. If more than one dealer requests the service for the same customer, our layout is designed for the equipment handled by the individual dealer,

so that we do not interfere with the proper competitive atmosphere at the dealer level. If we know that a layout has been prepared by any of the food service equipment consultants, we will not perform our service. However, in any case, where a layout excludes gas equipment, no matter who prepared the layout, we vigorously perform our services.

"As a result of the success of this program, it is our intention to offer food service equipment consultation services on a continuing basis.

"We recommend such a program to all gas companies who are fighting against a strong competitor."

Electronics

(Continued from page 24)

delegates. Developments at Arizona Public Service Company were covered by E. T. White of the Public Service Electric and Gas Co.; the Commonwealth Edison Co. story was presented by Mark Salvino of The Peoples Gas Light and Coke Co.; and Northern States Power Co. progress was reviewed by A. J. Brodtkorn of New Orleans Public Service.

In the card computer system category, the Cincinnati Gas and Electric history was reviewed by W. J. Ott, and Columbia Gas System progress was presented by D. W. Keller. J. P. Bromley presented the Consumers Power Co. story; and C. D. Otcasek reviewed The East

Ohio Gas Company operations. Laclede Gas Co. was represented by M. G. Meadows; Milwaukee Gas Light Co. was represented by J. E. Harrison; and Pennsylvania Power and Light Co. was represented by F. F. Beisel. In addition, the Philadelphia Electric Co. story was told by H. E. Mueller; the Southern California Gas Co. developments were presented by J. W. Vanier; the Washington Gas Light Co. experiences were discussed by W. C. DeNeane; and the Wisconsin Electric Power Co. history was covered by J. G. Cadby.

Many card system users are considering tape equipment, and well established tape system users are mechanizing additional applications and are considering the second generation computer equipment.

In addition to economic gains, Walter Ott and Deviere Cowles noted a major change being brought about by computer equipment. This change is the substantial increase in accuracy of the accounting procedures involved, resulting in reduced inquiries and in assurance to management that prescribed procedures are always being followed.

P. R. Lawson, Chairman of the EEI Accounting Division, concluded the meeting by pointing out that 168 delegates were registered from 62 utilities and manufacturers from 23 states, Canada, and Mexico. Further details of the seminar sessions are reported in the January issue of *Tubes and Tapes*, a publication issued jointly by the A. G. A. EEI Electronic Accounting Machine Developments Committees.

Blue star

(Continued from page 10)

tional hand-out pieces the builder can use; erect Blue Star home site signs, "addition" signs and directional signs; assist in kitchen layout and design.

Oklahoma Natural provides home service directors' help; assistance in getting cooperation of brand name manufacturers for advertising and promotion; design service by the utility's engineers for all-year air conditioning systems; appliances for use in display homes; promotional and piping allowances; a liberal line extension policy; and lifetime inspection and adjustment service of gas appliances.

Fully cooperating builders who put up large additions find they'll get either home service directors or wives of Oklahoma Natural employees as open house hostesses. Further, they may benefit from a press party held at the opening of an addition.

In return for assistance by Oklahoma Natural, the builder agrees to abide by national Blue Star requirements, plus special O. N. G. standards. These are the requirements:

1. A matchless built-in gas range

with thermostatically controlled top burner.

2. A "famli-rated" extended warranty gas water heater.

3. A gas central heating system with distribution system approved by O. N. G.

4. An optional extra outlet for one of the following A. G. A.-approved gas appliances; refrigerator, dryer, washer-dryer combination, air conditioning system, incinerator, yard light, or bathroom heater.

The Blue Star program is administered in Oklahoma Natural's general office in Tulsa, directed by Mr. Libby and his assistant, Lester L. Wildman. Last summer they drove from town to town on the O. N. G. system to explain the promotion to the firm's sales representatives. They designed a flip chart explaining all aspects of the program.

Those handling the program locally, meeting with builders, developers and architects, are Jerry Saulsberry, Jay Reed, Bob Wammack, Neil Markum, and Bruce Riley, Tulsa district; Bill Strain, Rodney Kessinger, Bob Gordon, Wade Cypret, and Bill Koonce, Oklahoma City district; Cliff Doane and Bill Goodwin, Muskogee district; George Dooley and Carl Denham, Shawnee district and

Bob Cain, Enid district.

The builder representative's job begins with some detective work. He discovers a development or housing project in its earliest stages—often before the land is purchased. He immediately begins soliciting the developer or builder.

"I went Blue Star primarily because I've never had such cooperation anywhere else," one builder commented enthusiastically. "Your Oklahoma Natural man camped at my doorstep for weeks. He always had the answer, promptly, to any problem I gave him."

Oklahoma Natural's builder representative follows through by helping write the newspaper copy, taking photos for TV ads, getting the appliances in, serving as a trouble shooter in countless ways, and finally, helping to arrange for the open house.

Builders in Oklahoma Natural's territory say they like the Blue Star program. Moreover, they believe the advantages of a Blue Star home help it to sell faster and easier, O. N. G. reports. Builders cite built-in gas ranges and gas perimeter heating as especially helpful to home sales.

Gold star

(Continued from page 30)

tion on the range.)

"The gold stars definitely helped me to make sales by pointing out features normally overlooked."

"The stars certainly attracted the attention of floor traffic, and since the

stars have been displayed, customers are asking more questions about the special features listed on the stars." (As a result, this dealer prepared a more effective and complete product story on the range than the one he was using prior to the campaign.)

"I made use of the stars by placing a star on the area of the range as I gave

my sales story on the feature mentioned on the star."

The merchandising manager for a large Oklahoma City department store was so favorably impressed with the gold stars that he requested several sets to be used with other gas range display material at the grand opening of a suburban store.

Business research

(Continued from page 18)

search group in the sales department, another group in the financial department, another group in the operations department, and so on. Furthermore, separate research groups of this nature might not be familiar with the interrelated activities being conducted by the separate groups, resulting in duplication of activities and inefficiencies. The problem of intimate acquaintanceship with departmental problems can be solved by assigning functional responsibilities to individual members of the coordinated business research department.

There are further problems to the establishment of research activities separately and discretely within individual departments. Many department heads, be it in sales, operations, finance or elsewhere, may be ex-

ceptionally well qualified to direct their group, and yet not be research-minded. Under these circumstances there might be inadequate recognition of the research function, resulting in inadequate budgets and staffing. Or where such research groups exist within the individual departments they may be used only to corroborate or reinforce the pre-conceived ideas of department heads, rather than to present objective and impartial analyses intended to foster the best decisions from an over-all company standpoint.

On the other hand, where a coordinated business research department reports to top executives, the non-research-minded department head is almost forced to utilize the impartial research studies which can be of assistance to him. I will deliberately leave aside the question of what happens when the top executives are not research-minded; it is obvious in such a circumstance that the com-

pany will undertake virtually no research activities and will be denied the advantages of this most useful management tool.

There are two basic sources of personnel in staffing a business research function. These represent people already within the company, and outsiders trained in the various functions included in the research activity.

In either event a research staff, both individually and collectively, must be composed of objective and open-minded people, able to reach meaningful and defensible conclusions from quantitative data which often are not mathematically definitive. They must have a basic and detailed understanding of company objectives, and of the interrelationships of all company operations. They must be able to reason logically and develop recommendations, based on their conclusions from quantitative data, which are understandable to executives not trained in technical re-

search procedures.

It is apparent that some significant background and training in the company is desirable in research personnel, if the other qualifications of educational and technical experience in the various sciences implicit in business research are also possessed. It makes relatively little difference whether the complete training is achieved by taking people who already possess such knowledge and exposing them to a training period to familiarize them with gas company problems; or whether people familiar with gas company problems obtain the specialized and scientific training subsequently, through college courses of an adequate nature. However, it is likely that in most utility companies there do not currently exist enough people who already possess both characteristics.

Actually, there are certain advantages to be gained by employing people specifically trained in these varied sciences, who have

gained their business experience from other types of organizations. The statement is frequently made that utilities are different from other business organizations, and this has led to rigid policies about promotion from within. This ignores the advantages to be gained through exposure to procedures that other types of companies have employed. Perhaps utility companies are different from others, but there remains the basic question of whether they *need* be different in view of the increasingly competitive nature of our business, and whether the availability of ideas gained in other fields of endeavor might not offer ideas adaptable to our problems which would benefit all of our companies.

The additional training on utility problems which would be necessary for these people could be attained either through job rotation within different departments of the utility, or by assignment rotation within the research department. Actually a coordinated business

research department would be one of the best places to learn the utility business. Exposure to the most important problems which the company encounters would be maximized, and some utilities have always considered even a limited research department as the best place for development of personnel prior to specialization at a higher level in some other department.

I need not summarize. I believe my personal conviction regarding the merits of a coordinated business research department, reporting to a top level executive, servicing all other departments of the company, and staffed by qualified personnel from whatever source derived, has been made clear. In my opinion, only in this manner can we assure ourselves of maintaining, and I hope improving, our competitive position as a supplier of efficient energy to the American economy.

Dallas

(Continued from page 13)

manufacturers of gas appliances may lease as little as 50 feet. The remainder of the Center will be subdivided into separate show rooms for both large and small national firms who will display gas products including heating and air conditioning equipment, broilers, free standing ranges, built-in ranges, dryers, washer-dryer combinations, refrigerators, incinerators, water heaters and gas lights.

Among the companies which have already leased space in the new Center are: Caloric Appliance Corp., Philadelphia; Cribben & Sexton Co., Chicago; Dixie Products Inc., Cleveland, Tenn.; Hardwick Stove Co. Inc., Cleveland, Tenn.; Holly-General Co., Pasadena, Calif.; Magic Chef, Franklin, Tenn.; The Maytag Co., Newton, Iowa; Norge Sales Corp., Chicago; O'Keefe & Merritt Co., Los Angeles; RCA Whirlpool Corp., St. Joseph, Mich.; Geo. D. Roper Corp., Kankakee, Ill.; A. O. Smith Corp., Kankakee, Ill.; The Sun-

ray Stove Co., Delaware, Ohio; and The Tappan Co., Mansfield, Ohio.

Officers and directors of Gas Industry Exhibitors, Inc., all of Dallas, include David J. Kerr, president, Joe B. Woods, vice president, Morris Hite, treasurer, and David A. Witts, secretary. Thomas L. Fisher, Jr., has been appointed manager.

An advisory committee includes Charles G. Barndt, Lone Star Gas Co., Robert G. Suttle, Southern Gas Association; Ray Cooper, A. G. A.; and S. F. Wikstrom, A. G. A.

'Playhouse 90' schedules 'Specials' in prime evening times

THE NEW SERIES of *Playhouse 90* "Specials" makes its debut this month over the CBS Television Network under the sponsorship of the gas industry.

Under the plan proposed by CBS, and approved by the A. G. A. Television Committee, *Playhouse 90* has left its regular Thursday evening time period and will appear from now on as a bi-weekly series, but with each program telecast on a different night of the week and at a different hour. In this way

Playhouse 90 will take over, or "pre-empt," the prime evening time spots normally occupied by such popular shows as *Garry Moore*, *Ed Sullivan*, and others.

The schedule of broadcast dates and time periods announced by CBS for February and March is as follows:

February 9, Tuesday 9:30-11:00 P.M. (EST).

February 24, Wednesday 8:00-9:30 P.M. (EST).

March 7, Monday 9:30-11:00 P.M. (EST).

March 22, Tuesday 8:00-9:30 P.M. (EST).

As a "Special"—with CBS investing substantial additional moneys of its own in casting, scripts and promotion—it is expected that *Playhouse 90* will enjoy even greater audience, stature and importance.

Under the new broadcast pattern, the gas commercials will continue to appear during the choice first half hour of the show.

Alberta approves natural gas export by PG&E subsidiary

THE Government of Alberta, Canada, has authorized larger natural gas exports from the Province by Alberta and Southern Gas Co. Ltd., a decision expected to have an important and favorable effect on the proposed \$338 million Alberta-California pipeline project.

Alberta and Southern is a Pacific Gas and Electric Co. subsidiary. A gas-purchasing firm, it is one of several companies that will operate a 1,400-mile system to bring gas from the foothills of the Canadian Rockies to northern and central California.

The Alberta Lieutenant Governor-in-Council approved recommendations by the Alberta

Oil and Gas Conservation Board raising from 2.3 to 4.2 trillion cubic feet the volume of gas Alberta and Southern can export from the Province over a 25-year period. The Conservation Board followed with an order authorizing the export.

Alberta and Southern had offered evidence that new gas discoveries and extensions of proved fields made more gas available for export.

The revised export authorization approved today is the final step required by Alberta and Southern to export gas from the Province.

Alberta and Southern now is presenting its

case in Ottawa before Canada's newly-created National Energy Board for a permit to export gas from the Dominion. Several other companies are seeking export permits for other areas at the same hearing.

"The Conservation Board's findings that additional gas reserves are available for export should strengthen our case in Ottawa," Norman R. Sutherland, president of PG&E and of Alberta and Southern, said in San Francisco. "The findings support our view that the Alberta-California project is a healthy stimulus to development of Western Canada's resources and thus to the whole of our neighbor nation's economy."

Industry news

A. G. A. issues report on heat transfer studies

A. G. A.'s COMMITTEE ON INDUSTRIAL and Commercial Research has just issued a report on "The Influence of Convection and Radiation in the Over-All Heat Transfer of a High-Temperature Gas-Fired Industrial Furnace."

This report about "the mechanism of energy transfer which occurs in industrial furnaces" is described as "of interest to furnace designers and operators." It deals with the technical phases of heat transfer, the financial

aspects of heating processes, and the optimum point at which it is most economical to process stock.

The report, based on studies conducted for the A. G. A. at the laboratories of Selsco Corp. of America, should also be valuable to plant operators in the metalworking field, where elevated temperatures are required, and to industrial gas sales engineers.

Copies of the report are available from A. G. A.'s Order Department at \$2 each.

Pacific Gas and Electric cites customer gains in past decade

PACIFIC GAS AND ELECTRIC CO. is entering the 1960 decade with 1,300,000 more customers than it had at the beginning of 1950. The 1959 year-end total of 3,560,000 customers was almost 60 per cent higher than the total 10 years ago.

In order to serve the continuing growth, the company will spend an estimated \$152 million in 1960 for construction of new facilities. Construction expenditures during the 1950 decade totaled \$1,694,000,000, and since World War II totaled almost \$2,200,000,000.

In 1950 the company imported natural gas for the first time from out of state through a

pipeline that was foreseen as early as 1944. Today that pipeline and a parallel line, each 502 miles long, transport about three-fourths of the gas required by the company's customers.

Pacific Gas and Electric hopes to obtain all necessary governmental authorizations in time for construction to begin this year on a natural gas pipeline from Canada. This project involves building a pipeline 36 inches in diameter and 1,404 miles long from fields in Alberta Province to the San Francisco Bay area. Hearings began in Ottawa on Jan. 5 before Canada's National Energy Board on applications for licenses to export the gas from

Canada and to build the Canadian portion of the pipeline.

LILCO plans new facilities

LONG ISLAND LIGHTING CO. expects to spend more than \$48 million in 1960 for the construction of new electric and gas facilities on Long Island. This amount exceeds the 1959 budget figure by \$3 million. Of the \$48 million, \$11 million will be spent on gas properties, mains, and services, and \$5 million will be spent for the erection of gas and electric operations centers.

Pacific Lighting firms budget \$86.5 million for new facilities this year

THREE PACIFIC LIGHTING system utilities, which provide natural gas service to a Southland population of eight million, have budgeted \$86.5 million to be spent for additions and improvements to facilities during 1960.

The plant budget, which does not include money for operating expenses, exceeds by \$8 million the greatest addition to plant in any one year in Pacific Lighting's 73-year history.

In another development, the integrated system's two distribution companies, Southern California Gas Co. and Southern Counties Gas Co., disclosed that they expect to add 90,000 new customers in 1960. Since 1945 the two companies have added an average of more than 90,000 customers every year. Moreover, their number of meters increased from 1,137,000 at the end of 1945 to about 2,400,000 at the end of 1959. (Surveys have shown that each meter serves an average of 3.5 persons.)

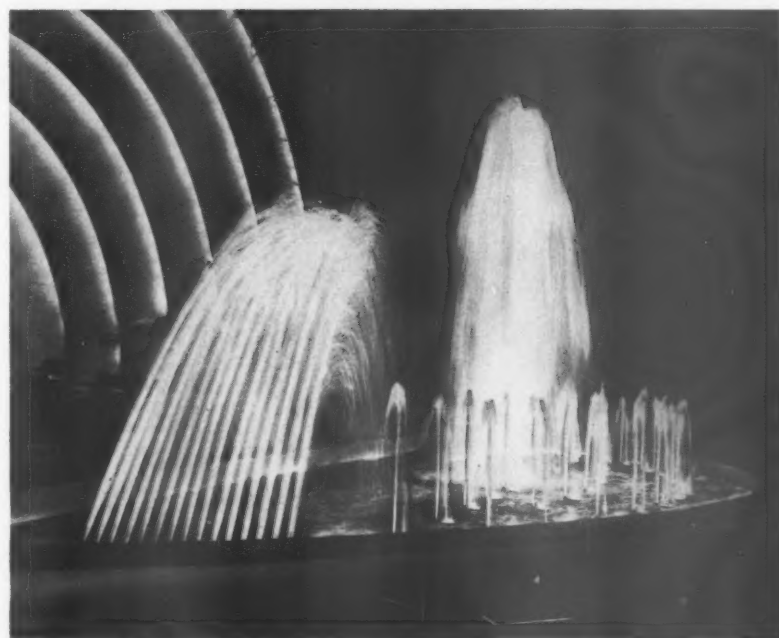
More than 40 per cent—\$36 million—of the \$86.5 million budget is slated to be spent on two major gas transmission projects that are expected to swell deliveries of out-of-state gas to southern California to two bil-

lion cubic feet of gas a day within the next few years. Present deliveries of out-of-state gas are 1.143 billion cubic feet daily.

The breakdown of the system's total budget

is as follows: Southern California Gas, \$37.7 million; Southern Counties Gas, \$23.4 million; and Pacific Lighting Gas Supply Co., \$25.4 million.

Gas illuminates fountain at Hollywood Bowl



Gas-life fountain at world famous Hollywood Bowl creates spectacular prelude to concerts under the stars. Engineered by Southern California Gas Co., the fountain combines splashing spray and colored lights with burning jets of gas inside central cone of water. It was designed by Henry Drefus

Corrosion engineers to meet

CORROSION IN THE oil and gas production industry will be the subject of five technical papers to be given at a special symposium on March 15 during the sixteenth annual conference of the National Association of Corrosion Engineers. Seven other papers of interest to corrosion engineers in oil and gas production will be presented during other symposia. The conference will be held from March 14-18 in Dallas, in conjunction with the 1960 corrosion show.

Hawaii project goes gas



Lt. (jg) and Mrs. William Greene were the first official residents of the new gas-equipped 1140-home Iroquois Point military housing project recently opened at Barber's Point Naval Air Station in Hawaii. Equipment includes Dixie gas ranges and Republic water heaters in Capehart homes. Honolulu Gas Co. is supplying project from a butane installation of 20 1,000-gallon storage tanks

Equipment leasing expected to double in 1960

THE COST OF LONG-TERM LEASING of production equipment by gas industry firms reached a total of \$3.6 million in 1959, a gain of 52 per cent over 1958, according to Robert Sheridan, president, Nationwide Leasing Co., Chicago.

Mr. Sheridan predicted that equipment leasing in the gas industry would double this year because more equipment manufacturers are using leasing as a sales tool to move their

products, more companies will lease their equipment to avoid the pinch of tight money, and more companies will be affected by the increasing technological progress that is speeding up the obsolescence of machinery.

A copy of a complete analysis of equipment leasing, "The Pros and Cons of Leasing," may be obtained free from the Foundation for Management Research, 121 West Adams Street, Chicago 3, Ill.

Maytag names Higdon and O'Brien directors

THE MAYTAG CO. has named two new directors in conjunction with enlarging its board from seven to nine members.

The new directors are E. G. Higdon, vice-president and comptroller of Maytag, and H. F. O'Brien, president of A. P. Smith Manufacturing Co.

Mr. Higdon became associated with Maytag in 1933 as an internal auditor. He was named comptroller in 1941 and a vice-president in 1956. He is also a director of all of Maytag's subsidiary corporations.

Mr. O'Brien has been president and director of A. P. Smith Manufacturing since 1941. He joined the firm in 1936. He is also a director of United States Pipe and Foundry Co., Howard Savings Institution, Colonial Life Insurance Co., New Jersey Bell Telephone Co., the Water and Sewage Works Manufac-

turers Association, and the National Association of Manufacturers.

Newspaper honors Will

E. H. WILL, chairman of the board, Virginia Electric and Power Co., was honored recently by *The Wall Street Journal* as an outstanding executive. During a luncheon at the Commonwealth Club in Richmond, Va., Donald MacDonald, eastern advertising manager of the newspaper, presented to Mr. Will a portrait wood carving in recognition of his and the utility's achievements. The portrait carving, one of 12 awarded each year by the *Journal*, was hand carved on Klobbel wood by Finnish artists. The portrait was made from an enlarged photograph of Mr. Will.

Arkansas Louisiana Gas, Consolidated Gas Utilities plan merger

THE BOARDS OF DIRECTORS of Arkansas Louisiana Gas Co. and Consolidated Gas Utilities Corp. have approved in principle the proposed merger of Consolidated Gas Utilities into Arkansas Louisiana Gas, subject to the approval of the stockholders of each company and the approval, to the extent required, by all regulatory agencies with jurisdiction.

If the merger is approved, stockholders of

Consolidated Gas Utilities will receive for each one share of stock one share of a new class of cumulative convertible preference stock of Arkansas Louisiana Gas that carries an annual dividend of 90 cents and that, for two years from the date of issuance, will be convertible into three-fourths of a share of common stock of Arkansas Louisiana Gas. The new preference stock will be non-callable for the first two years and will be callable

thereafter at the option of the company at \$23 per share.

The plan for merging the two companies contemplates that the facilities of Consolidated Gas Utilities will continue to be operated by those now employed by that company, and that the present stockholders of Consolidated Gas Utilities will be represented on the board of directors of the merged company.

New York State Natural plans \$5,906,000 investment in facilities

NEW YORK STATE NATURAL GAS CORP. is planning an investment of \$5,906,000 in its production, transmission, and storage facilities during 1960.

Some of the major projects will be the drilling of 42 gas wells in Pennsylvania and New York, 30 of which will be development wells in proven areas and 12 of which will be wells in regions where the company is exploring for new sources of gas; the construction of new field lines and the installation of measuring equipment in production areas where New York State Natural is drilling; the completion of underground gas storage projects started in 1959; and the supercharging of five engines at the company's Sabinsville, Pa., compressor station and one engine at its Preston compressor station near Waynesburg, Pa.

During the past two years, New York State Natural has explored Lake Erie for new supplies of gas and has drilled two wells. One was drilled in 1958 in a tract near the Penn-

sylvania-Ohio border and the other in 1959 in a tract near the Pennsylvania-New York border. This year the company may return to the

first tract and drill its third well. That project would start as soon as the navigation season opens on Lake Erie in the spring.

Pipeline financing completed by Transwestern

MORE THAN \$200 MILLION in financing for the construction of a major pipeline from the West Texas and New Mexico Permian Basin and the Texas and Oklahoma Panhandle has been reported as complete by Transwestern Pipeline Co. In addition, Transwestern and its gas suppliers have accepted all Federal Power Commission certificates necessary to complete the approval of the 1,809-mile project. The financing, which provides sufficient funds to complete the pipeline and to construct additional facilities costing more than \$5 million, has been broken down as follows: paid in capital by organizers, \$10 million; sale of 400,000 units to the public (\$40 million in 5 per cent, 10-year debentures and two million

shares of common stock), \$59,660,000; sale of 5 1/4 per cent first mortgage bonds, \$102,742,500; and five-year, 5 per cent bank loans, \$28 million. The pipeline is expected to be completed in July.

Gas lights relit

In 1888, the residents of staid old Gramercy Park in New York objected strenuously to the two huge lanterns which embellished the exterior of the then brand new Players Club. The lanterns were considered much too ostentatious. Recently, the Gramercy Park Association congratulated The Players for restoring gaslight to Gramercy Park. Yes, those same lanterns are once again lit—with gas!

Rockwell estimates 1959's sales total at near-record \$121 million

ROCKWELL MANUFACTURING CO. finished 1959 with estimated total sales of \$121 million, a figure 14 per cent higher than 1958's \$106 million and close to 1957's record \$122 million.

Estimated earnings, according to Willard F. Rockwell Jr., president, are in the \$2.70-2.75-a-share range on year-end capitalization. Earnings were \$2.14 per share in 1958 on

like capitalization.

Mr. Rockwell noted that both sales and earnings would probably have set records if the Federal Power Commission's approvals of new pipeline projects in the wake of the reversal of the Memphis decision in the fall of 1958 had not been "unexpectedly slow to date." More expeditious handling of the FPC's large backlog of pipeline applications

would inevitably have brought a sharp rise in the domestic valve and gas meter sales.

Even without this boost, however, Mr. Rockwell said, the firm is anticipating its best year in 1960 if no major rail strike occurs.

Barring such crises, the company expects sales to be about 10 per cent higher than they were this year.

A.G.A. announces new publications issued during January

(The catalog number, which must be included with each order, appears after each publication as "Cat. No.")

RESEARCH

• **Measurements of Secondary Stresses in Pipelines**, by T. J. Atterbury, D. L. Shipp, G. M. McClure, and H. J. Grover. \$3. Cat. No. 30/PR.

INDUSTRIAL AND COMMERCIAL

• **Gas Versus Electric Heating at Shingle Creek School**, by Frederick W. Hill. Reprint from *Minnesota Engineer*. Nine cents. Cat. No. 87/L.

ACCIDENT PREVENTION

• **Safety Siftings, Vol. 4, December 1959**, No. 4. One copy, free to members, 10 cents to nonmembers; more than one copy, 10 cents each to both members and nonmembers. Cat. No. 21(h)/AP.

STATISTICS

• **Quarterly Report of Gas Industry Operations, Third Quarter 1959**. Free. Cat. No. 20C/S.

• **A Coordinated Marketing Research Program for Gas Utilities**. Proceedings of a seminar conducted by the Marketing Research Committee. \$3. Cat. No. 57/S.

• **Monthly Bulletin of Utility Gas Sales, October 1959**. Free. Cat. No. 16j/S.

INDUSTRIAL AND COMMERCIAL PROMOTION

• **Water Heating Case Histories**. Free. Cat. No. 41/C.

Hupp acquires Fannon and Fannon Products

HUPP CORP. has acquired the assets of John J. Fannon Products Co. and John J. Fannon and Co., manufacturers of industrial process heating equipment and developers of paint baking ovens. The purchase involves cash and stock, plus additional incentive consideration based on future earnings, according to Don H. Gearheart, president of Hupp. The total amount of the transaction was not disclosed.

The acquisitions will be operated as a wholly owned subsidiary of Hupp, with John J. Fannon, Jr., as president and Robert J. Fannon as vice-president.

"This acquisition," said Mr. Gearheart, "brings to Hupp a creative engineering and development organization. . . . The Fannon activities will also help Hupp broaden con-

siderably its coverage in industrial infrared heating and will complement our own activities in this field."

Hupp's Perfection Industries division, explained Mr. Gearheart, has pioneered the use of the gas infrared heaters based on the inventions of Gunther Schwank. "With this dovetailing of personnel and products," he added, "we expect a major increase in sales of infrared heating equipment."

The headquarters of the new subsidiary will remain in Detroit, and all present personnel will be unaffected by the acquisition, Mr. Gearheart said. He added that with present production facilities in Detroit operating at capacity, it is contemplated that some manufacturing operations will be performed in the Cleveland plant of Perfection Industries.

Texas Illinois transfers assets to Peoples Gulf

TEXAS ILLINOIS NATURAL GAS Pipeline Co. recently transferred its assets to Peoples Gulf Coast Natural Gas Pipeline Co. to complete a plan of reorganization announced last September. Both companies are subsidiaries of The Peoples Gas Light and Coke Co.

Under the plan common stockholders of Texas Illinois on record at the close of business on Dec. 14, 1959, will receive one share of Peoples Gas capital stock for each two shares of Texas Illinois common stock. Continental Illinois National Bank and Trust Co. of Chicago is serving as agent to distribute the stock.

Since fractional shares of Peoples Gas common stock will not be issued, any Texas Illinois stockholder whose number of shares is not divisible by two may either buy or

sell through the agent a fractional interest to round out to a full share.

The dividend of 57.5 cents per share on Peoples Gas stock payable on Jan. 13, 1960, to stockholders on record on Dec. 13, 1959, will be payable on Peoples Gas shares distributed in exchange for Texas Illinois common stock under the plan.

Correction

In the article, "CCR Set Meets Peak-Shaving Needs," by C. B. Glover, which appeared in the December, 1959, issue of the *Monthly*, CCR was referred to as the "Continuous Catalytic Reforming" process. This should have been "Cyclic Catalytic Reforming" process.

Boiler firm changes name

PENNSYLVANIA RANGE BOILER Co., Inc., has changed its name to Pennsylvania-Bradford Appliance Corp. The change was made primarily to reflect the change in the company's products. When the company was established in 1881, its principal product was the range boiler. Today it manufactures a complete line of domestic water heaters. In recent months the company has also been engaged in a general program of expansion of corporate facilities and manufacturing techniques.

June in January



Gas-fired infra-red heaters under marquee of Carlton House, Pittsburgh, Pa., make summer out of winter for models beneath. Richard L. Conover, Equitable Gas Co., holds thermometer showing street temperature. Right, Joseph S. Schuchert. Both men are from Equitable Gas Co., Pittsburgh

Highlights of cases before the Federal Power Commission

Bureau of Statistics, American Gas Association

Certificate cases

● **Arkansas Louisiana Gas Co.** has filed a budget-type application to construct facilities to procure natural gas purchased from independent producers. The over-all cost is limited to \$2.7 million and each project may not exceed \$500,000.

● **Coastal Transmission Corp.** has sought authorization to construct natural gas facilities that will increase daily system capacity by 60 million cubic feet to 338 million cubic feet of natural gas. At an estimated cost of \$6.3 million, the company will build approximately 81 miles of lateral pipelines and two compressor stations with a combined rating of 3,500 horsepower, and will install an additional 1,500-horsepower unit to an existing compressor station. In another certificate case, which was approved by the FPC, the company was authorized to construct facilities for securing new gas supplies, when available, at an over-all cost of \$1 million, with no single project costing more than \$250,000.

● **Colorado Interstate Gas Co.** has filed a \$1 million budget-type application to facilitate the acquisition of new gas reserves. Each single project is limited in cost to \$200,000.

● **Columbia Gulf Transmission Co.** has been authorized to construct and operate a 10,500-horsepower remote-controlled experimental gas turbine compressor unit near Clementsville, Ky. The major appeal of this unit over conventional units is a substantial reduction in capital costs. The manufacturer has agreed to assume nearly two-thirds of the cost of the experimental installation, which has been estimated at \$1.6 million.

● **Consolidated Gas Utilities Corp.** has filed a budget-type construction application to expedite the securing of new gas supplies as they become available. The total cost of these facilities will not exceed \$750,000.

● **El Paso Natural Gas Co.** has filed a budget-type application to construct field facilities at a total cost not to exceed \$5 million. The cost of each project for attaching newly purchased natural gas reserves may not exceed \$500,000.

● **Houston, Texas, Gas and Oil Corp.** has proposed the construction of five new compressor stations, each of which will have a rated capacity of 4,000 horsepower, and approximately 199 miles of lateral transmission pipelines. The total cost of the proposed natural gas facilities, including meter and regulator stations, is estimated at \$12.5 million. The new facilities will be used to meet the demands of existing and future customers in Florida.

● **Montana-Dakota Utilities Co.** has sought authorization to construct and operate natural gas facilities expected to cost nearly

\$1.1 million. The application includes approximately 16 miles of transmission line, some field lines, 1,540 additional compressor horsepower, and appurtenant facilities. The transmission line will be used to serve Glasgow Air Force Base in Valley County, Mont.

● **Tennessee Gas Transmission Co.** has filed a budget-type construction application with a total cost of not more than \$5 million. Each project for adding new natural gas supplies purchased from independent producers is limited in cost to \$500,000.

● **Texas Eastern Transmission Corp.** has sought authorization to construct natural gas facilities, as needed, to attach new gas supplies. The total cost of these facilities is estimated at nearly \$4 million, and the cost of each project is limited to \$500,000.

● **Texas Illinois Natural Gas Pipeline Co.,** in a decision by a presiding examiner that was adopted by the FPC, was authorized to expand its system to receive natural gas from reserves in the south Texas area. The proposed construction, expected to cost nearly \$4.2 million, includes the addition of 2,000 compressor horsepower to each of eight main line stations—located in Arkansas, Illinois, Missouri, and Texas—and a 10-mile, eight-inch transmission line. These facilities will increase system capacity by 20 million cubic feet of natural gas daily for the benefit of existing customers in the Chicago area and 12 communities located along the pipeline in Missouri and Illinois.

● **Transwestern Pipeline Co.** has sought authority to construct and operate natural gas facilities estimated to cost nearly \$6 million in the west Texas and Anadarko Basin areas in Texas and Oklahoma. The company, which has already purchased natural gas in these areas, requires the proposed facilities in order to be able to attach newly contracted reserves of about 500 million cubic feet from the same general areas. The company needs the new purchase in order to maintain an adequate supply of natural gas for the present and future demands of the California-based Pacific Lighting Corp.

● **United Gas Pipe Line Co.** has filed a budget-type application designed to enable it to make new direct industrial sales of natural gas during 1960. The total cost of the facilities to be built may not exceed \$750,000 and the cost of each single project may not exceed \$200,000. The annual natural gas deliveries to new direct industrial customers will not exceed 10 billion cubic feet.

Rate cases

● **The Columbia Gas System, Inc.,** proposed \$23.5 million annual wholesale natural gas increase that was filed by four

subsidiaries has been suspended until May 7, when the new rates may be put into effect, subject to refund, if the proceedings have not been concluded. The companies requesting rate relief are Atlantic Seaboard Corp., which is seeking a \$4.4 million, or 6 per cent, annual increase to apply to 13 wholesale customers in Kentucky, Virginia, West Virginia, the District of Columbia, Maryland, and Pennsylvania; United Fuel Gas Co., which wants a \$14.6 million, or 9.3 per cent, increase to apply to nine wholesale customers in West Virginia, Kentucky, Ohio, and Pennsylvania; The Ohio Fuel Gas Co., which is asking a \$1 million, or 2.8 per cent, annual increase to become effective for 28 customers in Ohio; and Kentucky Gas Transmission Corp., which wants a \$3.6 million, or 9.3 per cent, annual increase that would become applicable to 12 wholesale customers in Ohio and Kentucky. In support of its filings, each company cited increases in the costs of purchased gas, transportation service, depreciation rates, and operations, and the need for a 6.8 per cent rate of return. In another FPC action two other subsidiaries' rate increase filings were suspended for five months. The Manufacturers Light and Heat Co., which serves 28 utility customers in Maryland, West Virginia, New York, Ohio, Pennsylvania, and West Virginia, had proposed raising its rates \$1.6 million, or 3.7 per cent, annually; and Home Gas Co. had proposed a \$316,000, or 2.5 per cent, annual wholesale rate increase that would affect six wholesale customers in New York. Both companies cited increased costs of purchased gas, transportation, and operations, and the need for a 6.8 per cent rate of return.

● **North Penn Gas Co.'s** application for a \$226,400, or 4.1 per cent, annual wholesale natural gas rate increase that would become effective for six customers in New York and Pennsylvania, has been suspended. The rate relief in this filing is needed in order to recover the anticipated increases, now under suspension, that have been proposed by two of the company's suppliers, Tennessee Gas Transmission Co. and New York State Natural Gas Corp.

● **Northern Natural Gas Co.** has filed substitute revised tariff sheets that will result in a reduction of \$2.1 million in its previously suspended proposed \$10.7 million annual wholesale natural gas rate increase. The revision—which affects 35 utility customers in Minnesota, Iowa, Nebraska, South Dakota, Wisconsin, and Kansas—was also suspended, but it was permitted to go into effect as of Dec. 29, 1959, subject to refund. The company is attempting to establish the historical differential of two cents per thousand cubic feet among all of its zone rates, to charge equivalent rates for its pipeline service and contract demand rate schedules, and to re-

duce the contract demand rates in Zones 1, 2, and 3 in order to equate total revenues and costs.

● South Georgia Natural Gas Co.'s proposed \$109,340, or 4.8 per cent, annual wholesale natural gas rate increase has been suspended. The proposed increase was based only on the proposed increase, also under suspension, sought by the company's sole supplier, Southern Natural Gas Co. The new rates would become applicable to 22 wholesale customers in Florida and Georgia.

● Southern Natural Gas Co.'s proposed \$7.8 million, or 8.3 per cent, annual wholesale natural gas rate increase has been suspended. If a hearing begun on Jan. 26 in this proceeding is not concluded by June 1, the new rates will become effective, subject to refund. The new rates—which would affect 97 wholesale customers in Alabama, Georgia, Mississippi, and South Carolina—are based on increased costs, particularly of purchased gas, and on the need for a 7 per cent rate of return. A previously suspended increase that amounts to \$10.1 million annually has been collected, subject to refund, since Nov. 1, 1959.

● Texas Gas Pipe Line Corp.'s proposed rate increase to its only wholesale customer, Transcontinental Gas Pipe Line Corp., has been suspended until March 22, when it may become effective, subject to refund. The proposed increase, which amounts to \$470,400, or 13.1 per cent, annually, is needed to offset the increased cost of gas purchased from producers whose new rates may go into effect, subject to refund, in March and April. Texas Gas Pipe Line is currently collecting, subject to refund, a previously suspended annual increase of \$470,200.

SUMMARY OF INDEPENDENT GAS PRODUCER RATE FILINGS—NOVEMBER 1959

	Number	Annual Amount
Tax rate increases allowed without suspension	1	\$ 130
Other rate increases allowed without suspension	42	303,895
Rate increases suspended	89	3,744,485
Total rate increases	132	4,048,510
Tax rate decreases allowed without suspension	6	2,670
Other rate decreases allowed without suspension	—	—
Total rate decreases	6	2,670
Total rate filings	616	—
Total rate filings acted on from June 7, 1954, to Nov. 30, 1959	42,462	—
Rate increases disposed of after suspension	21	158,736
Amount allowed	20	158,006
Amount disallowed	—	—
Amount withdrawn	1	730
Rate increases suspended and pending as of Nov. 30, 1959	2,882	\$137,210,281

● In another action, the FPC adopted, with modifications, the decision of Examiner Kelly that authorized the merger of Pacific Northwest Pipeline Corp. into El Paso Natural Gas Co. One condition of the merger requires that tax savings that result from tax loss carry-overs of the merged company be credited to a special reserve for the benefit of consumers. It is claimed that such savings amount to nearly \$4.7 million for the year 1955. Another condition—designed to prevent the cost of the merged company from falling on California customers—requires El Paso Natural Gas to maintain its accounts in order to be able to provide data that will show Pacific Northwest Pipeline's system costs in future rate cases. El Paso Natural Gas is required to account for, and

to allocate, not only direct costs but also all costs between the present two systems and between the three portions of Pacific Northwest Pipeline's system.

● Another decision, filed by Examiner Hall and adopted by the FPC, authorized Mississippi River Fuel Corp. to deliver up to 374,000 cubic feet of natural gas daily to Natural Gas Improvement District No. 2 of Ashley County, Ark., for distribution in an area not now served with natural gas.

● In an additional decision, filed by Examiner Frayee and adopted by the FPC, Northern Natural Gas Co. was authorized to sell natural gas to the Cornbelt Power Cooperative of Humboldt, Iowa. The authorization limits sales of firm gas to 50,000 cubic feet daily, and that gas must be used for space heating, thawing coal tars, and pilot fuel. Interruptible sales for power generation are limited to 12 million cubic feet per day.

● In another action, The Peoples Gulf Coast Natural Gas Pipeline Co., a newly formed subsidiary of The Peoples Gas Light and Coke Co., was authorized to acquire the assets of another subsidiary, Texas Illinois Natural Gas Pipeline Co. It is hoped that the new subsidiary will ultimately be merged with Natural Gas Pipeline Co. of America, another subsidiary, in the interests of a simplified corporate structure.

● Another decision, filed by Examiner Simpson and adopted by the FPC, authorizes and directs Texas Gas Transmission Corp. to deliver up to 2.8 million cubic feet of natural gas daily to Indiana Natural Gas Corp., which intends to distribute the allocation to Orleans and Paoli, Ind.

Three LP-Gas companies merge interests in Conch Methane Co.

THE INTERESTS OF Continental Oil Co., The Union Stock Yard and Transit Co. of Chicago, and the Royal Dutch Shell Group of companies in the liquefied natural gas field will be developed in the future through the medium of a jointly owned company called Conch Methane Co., Ltd.

Continental Oil and Union Stock Yards—which are American companies with head offices in Houston and Chicago, respectively—have pioneered research in the liquefied

natural gas field through their joint subsidiary, Constock International Methane, Ltd. Constock recently developed a method of transporting natural gas in liquefied form at a temperature of -258°F .

As a result of that research, Constock and the Gas Council in the United Kingdom have been participating through a joint company, British Methane, Ltd., in shipping liquid methane from Lake Charles, La., to the United Kingdom. The first cargo was suc-

cessfully carried last February by the "Methane Pioneer," a tanker owned jointly by Constock and the Gas Council. In the past year the ship has regularly delivered 2,000-ton cargoes of liquid methane to the North Thames Gas Board's special depot at Canvey Island, Essex.

Shareholders in Conch Methane will be Canadian Shell, Ltd. (a company of the Royal Dutch Shell Group), Continental Oil, and Union Stock Yards.

Michigan company expands facilities

MICHIGAN WISCONSIN PIPE LINE CO., an affiliate of American Natural Gas Co., has asked the Federal Power Commission to approve a further expansion of its pipeline facilities that will increase its total capacity by 333,000,000 cubic feet of gas daily this year.

The expansion program will cost approximately \$73,500,000.

About 65 per cent of the additional gas supply will be purchased by American Natural's distribution subsidiaries, Michigan Con-

solidated Gas Co. and Milwaukee Gas Light Co.

In the application to the FPC, Michigan Wisconsin asked for specific approval to proceed with two major construction programs that will provide large volumes of gas from two separate sources. A third expansion program to import gas from western Canada already has been approved. The three programs will increase the peak capacity of the company's system to 1,470,000,000 cubic feet of gas a day.

Dayton Power offers bonds

A PROPOSED \$25 million offering of 30-year, first mortgage bonds has been announced by the Dayton Power and Light Co. Bids will be opened late this month and proceeds will be used to repay \$18,800,000 in temporary bank loans and to defray part of the cost of the 1960 construction program. In the 10-year period that began on Jan. 1, 1950, the company's financing program totaled \$97,516,000. The offering will be open to competitive bidding and will be made to investors by a prospectus.

Pacific Gas and Electric predicts economic gains in 1960

ECONOMIC GAINS in northern and central California in 1960 will probably exceed the gains in 1959, according to O. R. Doerr, sales vice-president of Pacific Gas and Electric Co.

The company's annual market outlook study presents a broad view of vigorous growth in the 47-county Pacific Gas and Electric service area. The market report highlights these areas:

Population: An increase estimated at 3.6 per cent for the year will add 558,000 persons in California. About 260,000 of these people will be in the 47 counties in which the company renders gas or electric service. The major growth factor will be migration from other areas. The company expects to connect 56,000 new electric customers and 60,000 new gas customers.

Housing: An estimated 84,000 new dwellings will be built in the company's service area.

Personal income: An increase of approximately 6 per cent—to \$42 billion for the state—in 1960 is estimated. California is now the second-ranking state in total personal income. In five years New York's lead over California has been whittled from 25 to 10 per cent.

Retail sales: Sales of taxable items are expected to parallel the increase in income, rising an estimated 6 per cent to a record high level of \$10.5 billion for the 47-county area.

Manufacturing employment: A gain estimated at 4 per cent over last year will bring total employment to about 318,000 workers in northern and central California. While the population of the area increased only 18

per cent between 1954 and 1959, factory employment increased 23 per cent.

Appliance sales: A total of more than one million major appliances to be sold by local dealers in the service territory will be the objective of a massive sales promotion program by the company in cooperation with the gas and electric industries. The 1960 goal is slightly higher than the record achieved in 1959, and newspaper and other advertising will be a major means of attaining this end.

Industry: Commitments for new or expanded plants, which have averaged \$335 million annually over the past five years in the service territory, are expected to continue at a high level. Not included in this industrial expansion is the company's own construction, which will be about \$152 million in 1960.

Canada to add 100,000 gas users in 1960

GAS UTILITIES will add nearly 100,000 new customers in 1960, N. E. Tanner, president of the Canadian Gas Association, predicted recently.

Pointing out that natural gas service has been supplied to more than 900,000 Canadians in the last decade, Mr. Tanner stated that the total of natural gas users in Canada is now more than 1,100,000.

"The coming year," said Mr. Tanner, "will, without doubt, see a continuation of the rapid expansion of the gas industry. Utility sales and service programs will be widened

to encompass an even greater portion of the Canadian population."

Mr. Tanner predicted that competition for the appliance sales market will increase among the various fuels. He also noted that marked gains were made last year in the sales of gas water heaters, furnaces, and clothes dryers, and said that aggressive marketing and sales methods will be used this year to increase the sales of these and all other gas-fired appliances. Finally, he said that new and radical types of gas-fired heating units would soon be sold in Canada.

Northern Illinois builds line

CONSTRUCTION WILL BEGIN soon in Earlville, Ill., on a 75-mile pipeline that will transport natural gas from Northern Illinois Gas Co.'s storage reservoir near Troy Grove to the heart of the utility's distribution system near LaGrange. Completion of the 30-inch-diameter pipeline is scheduled for Sept. 1. The Troy Grove porous sandstone underground reservoir is currently undergoing extensive withdrawal tests that will help to determine its usefulness in meeting the expected increase in space heat demands during the 1960-61 heating season.

Natural gas to cool and heat new Albuquerque bank skyscraper

NATURAL GAS supplied by Southern Union Gas Co. will be used to cool and

heat the 14-story Bank of New Mexico Building now under construction in Albuquerque,

N. M. The cooling of the \$4 million structure will be accomplished by one of the largest refrigerated air conditioning systems in the state.

The system will be installed by Bondel Plumbing Co. of Albuquerque.

W. C. Kruger and Associates of Santa Fe is the architect for the building and Bridgen and Paxton of Albuquerque are the consulting engineers. Tallest in the state, the building is being erected by George A. Fuller Co. of New York City for The Bank Realty Co.

The entire structure will be cooled by a single 300-ton steam-powered absorption unit manufactured by The Trane Co. Located on the roof, the equipment will use low-pressure steam generated by natural gas to produce chilled water for air conditioning. When operating at maximum capacity, the unit will be capable of providing cooling power equivalent to that furnished by 600,000 pounds of ice melting in 24 hours.

The natural gas-driven equipment was chosen on the engineers' recommendations because of its low operating expense, efficient performance, lack of vibration, quietness of operation, and ability to adjust automatically to varying loads.

The principal owners of Bank Realty are Trammell Crow of Dallas, Tex.; Winthrop Rockefeller and R. A. Lile, both of Little Rock, Ark.; and Willard Kruger of Santa Fe, N. M. The leasing agent for the new building is Walter Burger Co. of Albuquerque.



The new Bank of New Mexico Building, now under construction in Albuquerque, will be both cooled and heated by natural gas. The \$4 million structure will utilize a 300-ton absorption unit to produce chilled water for air conditioning. Southern Union Gas Co. will supply the natural gas

Con Edison elects J. Eliot McCormack vice-president; promotes 5 others



J. Eliot McCormack

CONSOLIDATED EDISON CO. of New York, Inc., has announced a number of personnel changes.

J. Eliot McCormack has been elected vice-president. His responsibilities will be in the fields of production and operation.

Dr. S. Charles Franco has been appointed executive

medical director.

William C. Beattie, Dr. William P. Eckes, and Gordon R. Milne have been elected assistant vice-presidents.

Thomas C. Duncan has been appointed chief electrical engineer.

Harry W. Dierman has been appointed chief mechanical engineer.

Mr. McCormack first became affiliated with Con Edison when he joined the New York and Queens Electric Light and Power Co. as a junior engineer. Named distribution engineer of the Queens firm in 1937, he later

became chief distribution engineer for Con Edison. In the latter post he played a leading part in the integration of electric and gas transmission and distribution work. He was elected assistant vice-president in 1953.

Dr. Franco has been a member of Con Edison's medical staff since 1935, when he was appointed physician-in-charge of a medical bureau at Waterside electric generating station. He became an associate medical director in 1950.

Mr. Beattie became Con Edison's manager of production in 1954. In that post he was responsible for the operation of the company's electric generating stations and gas manufacturing and processing plants. Among the positions he has held since joining the company in 1927 are head of the mechanical construction bureau and superintendent of the service bureau. In the latter post he established the techniques that set the pattern for the successful changeover of Con Edison's territory from manufactured gas to natural gas.

Dr. Eckes became chief of Con Edison's medical bureau in 1946. He was first associated with Con Edison, then Con Gas, in

1926 as a medical examiner. He subsequently organized the general office dispensary for the employee's Mutual Aid Society and served as district doctor. Later he joined the medical department as an administrator. He became assistant medical director in 1945.

Mr. Milne served in a variety of engineering positions with Con Edison before his appointment as chief mechanical engineer in 1958. For many years he was responsible for the mechanical design and over-all efficiency of the company's generating plants. He also played a leading role in the concept and design of Con Edison's Indian Point atomic plant, now under construction at Buchanan, N. Y.

Mr. Duncan joined Con Edison in 1927 as a tester. He was later identified with the design and development of the company's overhead and underground electric distribution systems.

Mr. Dierman joined New York Steam, since merged into Con Edison, in 1927. He became assistant mechanical plant engineer for the parent company in 1948. His most recent post was that of associate purchasing agent.

Personal and otherwise

Cities Service Gas elects Levan secretary, director

A. W. LEVAN has been elected secretary and a director of Cities Service Gas Co. He was previously assistant secretary and general auditor.

Mr. Levan is also a director of Cities Service Gas Producing Co.

Mr. Levan joined the Cities Service organization in 1920 as a bookkeeper and office manager for Pawhuska Oil and Gas Co. In 1924 he went to the Empire companies in Bartlesville to handle various auditing as-

signments. In 1939 he became supervisor of auditing operations for Cities Service Gas. He was named assistant secretary of the firm in 1947.

Mr. Levan is a charter member and past president of the Oklahoma City chapter of the Institute of Internal Auditors and a member of the Management Committee of A. G. A.'s Accounting Section. He is also a past member of A. G. A.'s Internal Auditing Committee.

Stone and Webster elects T. C. Williams chairman and F. W. Argue president

STONE AND WEBSTER ENGINEERING Corp. has elected T. Cortland Williams chairman of the board and Fred W. Argue president.

In other developments Alfred L. Hartridge was elevated from financial vice-president and treasurer to executive vice-president and Dr. Arthur J. Good was advanced from vice-president and comptroller to vice-president and treasurer.

Mr. Williams joined Stone and Webster in 1923 as a mechanical engineer. During the past 26 years he has directed the construction of many different projects, including the atomic energy installations at Oak Ridge, Tenn. He was elected president in 1955.

Mr. Argue joined the company in 1941 as a power engineer after 20 years of experience in utilities work and engineering education.

He became engineering manager in 1954 and executive vice-president early in 1959.

Mr. Hartridge became associated with the firm in 1931.

He was named treasurer in 1953 and vice-president in 1954.

Dr. Good became comptroller of Stone and Webster in 1956. Before that he was managing director of the company's affiliated company in London for five years.

Connecticut electric and gas group elects Barney president to succeed Bertolette

THE CONNECTICUT ELECTRIC AND GAS Association has elected A. D. Barney, chairman of the board of The Hartford Electric Light Co., president. He succeeds N. B. Bertolette, chairman of the board of The Hartford Gas Co.

Mr. Bertolette, who has retired from the association, was president since its inception in 1943.

Other new officers are vice-presidents, R. A. Gibson, president, Hartford Electric Light, and H. R. Bacon, president, The Housatonic Public Service Co.; secretary and treasurer, R. F. Probst, vice-president and secretary, The Connecticut Light and Power Co.; and assistant secretary and treasurer,

C. J. Ramage, assistant secretary and treasurer, Connecticut Light and Power.

New executive committee members are chairman, S. R. Knapp, president, Connecticut Light and Power; Mr. Barney; William

J. Cooper, president, United Illuminating Co.; W. T. Jebb, president, Hartford Gas; E. G. Rhodes, president, New Britain Gas Light Co.; and R. A. Malony, president, The Bridgeport Gas Co.

Lawrence Gas elects Maguire vice-president, manager

LAWRENCE GAS CO. has elected Robert E. Maguire vice-president and manager. He succeeds George W. Culver, who retired.

Mr. Maguire joined the New England Electric System as a training student in 1950. In 1951 he was assigned to the engineering department of the company's gas division. He was named superintendent of Wachusett

Gas Co. in 1953 and general superintendent of Lawrence Gas last March.

In another development, Armando O. Guarino was named to succeed Mr. Maguire as general superintendent. Mr. Guarino, who has been in the gas business since 1923, became assistant general superintendent of Lawrence Gas last March.

Lone Star Gas Co. promotes Hulcy, Ochterbeck, Shultz, Reading, Gross

LONE STAR GAS CO. has announced five personnel changes.

Louis B. Hulcy has been named general superintendent of the general division of distribution.

W. H. Ochterbeck has succeeded Mr. Hulcy as chief engineer.

J. P. Shultz has been appointed distribution engineer.

R. E. Reading has become manager of the rate section of the comptroller's department.

J. E. Gross has been named distribution engineer for the south Texas region.

Mr. Hulcy has served as chief engineer

since 1956. Mr. Ochterbeck had served as distribution engineer in the south Texas region since 1954. Mr. Shultz had been a member of that region's engineering staff since he joined Lone Star last April.

Mr. Hulcy joined Lone Star as storekeeper at Cleburne in 1939. He became manager of Grand Prairie distribution operations in 1941 and field engineer in distribution in Dallas in 1950. He was named control engineer for the general division in 1955.

Mr. Ochterbeck joined Lone Star in 1926 as an engineer in the construction department. He became assistant chief engineer for

the general division in 1943.

Mr. Shultz has succeeded Mr. Gross.

Mr. Reading, who had served as general superintendent of the general division of distribution since 1956, joined Lone Star in 1939. He was named research engineer in 1941, distribution engineer in 1946, and general division chief engineer in 1954.

Mr. Gross, who has succeeded Mr. Ochterbeck, joined Lone Star in 1953 as an industrial engineer in Waco. In 1955 he was named junior distribution engineer and in 1956 he was transferred to Garland as district distribution engineer.

Names in the news—a roundup of promotions and appointments

UTILITY

Alfred H. Doud has been appointed associate director of public relations for Rochester Gas and Electric Corp. He joined the company in 1924 and became assistant director of public relations in 1953.

Michigan Consolidated Gas Co. has announced three personnel changes in its sales department. William J. Marion has become manager of industrial and commercial sales. He joined the firm in 1945 and was previously sales manager of the northern districts. He has been succeeded in that position by Robert G. Grice. Mr. Grice started with the company in 1949 and was formerly head of the commercial and dealer department in Grand Rapids. Finally, William E. Green was appointed sales superintendent of the Detroit district's commercial division.

Robert L. Weil has been promoted to auditor of Pacific Lighting Gas Supply Co. He succeeds W. D. Morningstar, who recently became assistant vice-president and assistant treasurer. Mr. Weil joined the firm in 1946 and became accounting supervisor in 1954.

F. E. Prudhomme and B. L. Sykes have been named chief draftsman and assistant chief draftsman, respectively, of Lone Star Gas Co.'s transmission engineering department. Mr. Prudhomme, who replaces the late D. W. Bright, became associated with the company in 1934 and was named assistant chief draftsman in 1951. Mr. Sykes started with the firm in 1930 and was appointed draftsman supervisor in 1947.

George E. Morgan has been named to the newly created position of assistant vice-president in charge of operations of New Jersey Natural Gas Co. He joined the company in 1954 and was named assistant manager in charge of operations of the central division two years ago.

The Ohio Fuel Gas Co. has appointed Alvin M. Hutchison manager of transmission. He succeeds J. H. Lang, who retired on Jan. 1. Mr. Hutchison started with the company in 1930 and became assistant manager of transmission in 1958. In another development, Albert E. Hutton was named plant engineer of the Norwalk district. He joined the firm in 1953 and became plant engineer in the Mansfield district a year

later.

Claire Crabill has been promoted to suburban district manager for Central Illinois Light Co. He replaces Harry Linberg, who retired on Feb. 1. Mr. Crabill started with the company in 1933 and became sales manager of the Peoria division in 1956. He has been succeeded by L. A. Swanson, who joined the firm in 1929 and was named manager of the Lacon division in 1955.

DeWitt A. Forward has been elected a director of American Natural Gas Co. Until his retirement last Oct. 1, he was a director and vice-chairman of the board of the First National City Bank of New York.

MANUFACTURER

Earl G. Davidson has been promoted to national service training supervisor for Norge Division of Borg-Warner Corp. He joined the company in 1948 and was previously field service engineer. In another development, William Thomas, Jr., was named manager of the west central division of Norge's utility department. He was formerly sales manager of Greeley Gas Co.

Alvan W. Holeywell has been elected treasurer of Pyrofax Gas Corp. He joined the firm in 1939 and became secretary in 1957. Mr. Holeywell will continue as secretary.

Robert D. Crane has been appointed director of purchases and traffic for Dresser Industries, Inc. He replaces Robert C. Kelley, who has retired. Mr. Crane joined the firm in 1958 and served as assistant director of purchases. Mr. Kelley started with the company in 1944 as director of purchases and traffic.

Howard W. Lundgren has been appointed special sales representative for Johns-Manville Corp.'s pipe wraps and industrial mat products in the northeastern region. He was formerly associated with Pipe Line Co., Hartford, Conn., and The Pipe Line Service Corp., Franklin Park, Ill.

Clarence Dunlop, vice-president—manufacturing facilities planning, retired from Burroughs Corp. on Jan. 1 after 40 years. He joined the firm in 1919 and became vice-president in 1952.

Caloric Appliance Corp. has named A. di

Zerega sales representative in the central and western Kansas area. He was previously a sales representative for R. W. Ferris Co., Kansas City, and commercial and air conditioning sales manager for The S. A. Long Co., Inc., Wichita.

W. E. Otis has been appointed contract and marketing administrator for the Grayson controls division of Robertshaw-Fulton Controls Co. He joined the company in 1951 and became contract administrator in 1954.

The Maytag Co. has announced six personnel changes. Melvin L. Lewis has been promoted to senior consumer research analyst. He joined the firm as a sales analyst in the market research department in 1956. Fred Lureman has been named head of the dealer advertising section of the advertising department. He started with Maytag in 1952 and became a staff marketing assistant last June. Dean M. Ward has been promoted to manager of the inventory control department. He became associated with the firm in 1954 and was named an inventory control analyst in 1957. George L. Sundberg has been appointed regional manager of a 28-county area of North Carolina. He joined the company in 1955 and was promoted to staff marketing assistant a year ago. G. J. (Jack) Haworth has been named a district salesman for Maytag Detroit Co., Inc. He joined Maytag in 1952 and became service supervisor for Maytag Detroit when it was formed in 1957. He has been succeeded as service supervisor by Arthur E. Miller, who joined Maytag in 1958 and became a field service assistant in the Pittsburgh branch early last year.

Lennox Industries, Inc., has appointed Robert A. Pierce and F. Gordon Lenzi general manager and sales manager, respectively, of the Lennox-Syracuse (N. Y.) division. Mr. Pierce, who started with the firm in 1946 and became sales manager of the division in 1951, succeeds the late H. G. Krayenhof. Mr. Lenzi joined the firm in 1946 and was named New England division manager in 1951.

Victor G. Pappas has been named sales representative for Temco, Inc., in an area covering Alabama, Mississippi, Louisiana, and west Tennessee. He joined Temco in 1957 as sales engineer in the middle Tennessee territory.

OTHER

Carl A. Schlegel, a vice-president and director of United Engineers and Constructors, Inc., retired on Dec. 31, 1959. He had been associated with the firm and its predecessor companies since 1910.

Dr. John A. Wheeler, nuclear physicist and professor at Princeton University, has been appointed to the board of trustees of Battelle Memorial Institute.

H. W. Slack and M. C. Westrate have been elected directors of Commonwealth Services, Inc. Mr. Slack is director, vice-president, and chief structural engineer of Commonwealth Associates, Inc. Mr. Westrate is chief electrical engineer, director, assistant secretary, and assistant treasurer of Commonwealth Associates.

Robert L. Gage, manager of the industry development division of Michigan Consolidated Gas Co., has been elected president of the Detroit Area Economic Forum.

Dr. Richard A. Glenn, supervising chemist for Bituminous Coal Research, Inc., has been elected chairman of the American Chemical Society's division of gas and fuel chemistry for 1960. In addition, Joseph Grumer of the United States Bureau of Mines was named chairman-elect and Dr. Robert S. Montgomery of Dow Chemical Co. was elected secretary-treasurer. Finally, Dr. Harlan W. Nelson of Battelle Memorial Institute was named division delegate to the society's council and Dr. M. B. Dell of Alcoa Research Laboratories was named alternate.

CONVENTION CALENDAR

1960

MARCH

- 14-18 •National Association of Corrosion Engineers, Annual Convention, Dallas, Texas.
- 21-23 •Mid-West Gas Association, Annual Meeting and Convention, Hotel St. Paul, St. Paul, Minn.
- 24-25 •New England Gas Association, Annual Meeting, Hotel Statler, Boston, Mass.
- 24-25 •Oklahoma Utilities Association, Annual Convention, Biltmore Hotel, Oklahoma City, Okla.
- 30-April 1 •Gas Appliance Manufacturers Association, Annual Meeting, The Greenbrier, White Sulphur Springs, W. Va.

APRIL

- 5-7 •A. G. A. Sales Conference on Industrial and Commercial Gas, The Shamrock-Hilton Hotel, Houston, Texas.
- 8-9 •Florida-Georgia Gas Association Convention, Biltmore Hotel, Palm Beach, Fla.
- 18-23 •American Institute of Architects, Annual Meeting, San Francisco, Calif.
- 19-21 •Research and Utilization Conference, Hotel Carter, Cleveland, Ohio.
- 21-22 •Indiana Gas Association, French Lick-Sheraton Hotel, French Lick, Ind.
- 24-26 •Independent Petroleum Association of America, Midyear Meeting, Denver Hilton Hotel, Denver, Colo.
- 25-27 •A. G. A.-Edison Electric Institute National Conference of Electric and Gas Utility Accountants, Roosevelt and Commodore Hotels, New York City.
- 25-27 •Southern Gas Association, Annual Convention, Galveston, Texas.

MAY

- 9-12 •A. G. A. Commercial Gas School, Edgewater Beach Hotel, Chicago, Ill.
- 9-13 •Operating Section, Joint Distribution and Transmission Conference, Hotels Roosevelt and Jung, New Orleans, La.
- 12-13 •A. G. A. Eastern Gas Sales Conference, Shoreham Hotel, Washington, D. C.
- 16-18 •A. G. A. Mid-West Regional Gas Sales Conference, Edgewater Beach Hotel, Chicago, Ill.
- 23-24 •Operating Section, Production Conference, Hotel Roosevelt, New York City.
- 26-27 •The Natural Gas and Petroleum Association of Canada, Annual Convention, Niagara Falls, Ontario.

OBITUARY

Sir Frederick Joseph West

chairman and managing director of West's Gas Improvement Co., Ltd., Manchester, England, died on Nov. 14, 1959. He was 87.

Sir Frederick, who was a noted gas engineer and utility executive in Great Britain, was a member of A. G. A. from its founding days in 1919. During his career, he traveled extensively through the United States on inspection tours of gas facilities and frequently served as a consultant on the construction of gas plants here.

In addition to serving as an executive with his company—which was founded by his father, John West, in 1874—Sir Frederick served in numerous professional and civic posts. Some of these positions were: president of the Institution of Gas Engineers from 1941-42, chairman of the Society of British Gas Industries from 1910-11, president of that society from 1947-49, member of the Manchester City Council for his home ward of Newton Heath in 1905, alderman there in 1920, and lord mayor there in 1924.

Sir Frederick was created Knight Bachelor in 1936 and Knight Commander of the Order of the British Empire in 1943, and was promoted to Knight Grand Cross in 1947.

Austin C. Ross

a former vice-president of Worthington Corp., died on Jan. 8 after a long illness. He was 66.

Before joining Worthington, Mr. Ross was associated with Rolls Royce of America, Inc., where he eventually served as a vice-president.

In 1932 Mr. Ross became assistant general purchasing agent for Worthington in Harrison, N. J. Three years later he moved to Buffalo, N. Y., as assistant general manager of the compressor and engine division.

He became general manager of the division in 1940 and a vice-president in 1950 and

continued in both positions until his retirement in 1958.

Mr. Ross was a member of A. G. A., the Buffalo Chamber of Commerce, the New York State Society of Professional Engineers, the National Association of Manufacturers, and the Independent Natural Gas Association of America.

He is survived by his widow, Anna, and two sons.

Frank C. Gordon

assistant treasurer, Consolidated Edison Co. of New York, Inc., died on Jan. 14. He was 62.

Mr. Gordon joined New York and Queens Electric Light and Power Co. in 1914. He became treasurer of the Queens company in 1925.

In 1945, after the merger of the Queens company into Con Edison, Mr. Gordon was elected an assistant treasurer of the parent firm.

He is survived by his widow, Madelyn, two sons, and a daughter.

John V. Postles

a civil engineer and an employee of Philadelphia Gas Works, division of The United Gas Improvement Co., for 38 years until his retirement in 1952, died on Jan. 4. He was 70.

At the time of his retirement he was vice-president of production.

Mr. Postles was a registered professional engineer and a member of both A. G. A. and the Pennsylvania Gas Association.

He is survived by his widow, Helen, a daughter, and a son.

Clifford Johnstone

former managing director of the Pacific Coast Gas Association, died on Dec. 30, 1959. He was 70.

He became managing director in 1924 and retired in 1956.

Prior to 1924 he served as a gas engineer with the California Railroad Commission, now the Public Utilities Commission.

Mr. Johnstone is survived by his widow, Fredonia, and a daughter.

Personnel service

SERVICES OFFERED

March Graduate—gas fuel department, Southern Technical Institute, unit of Georgia Tech. Five years previous experience, desires position in technical sales work. Draft exempt. Married. Prefer Western location. 1968.

Plant, Distribution and Utilization Experience—manufactured, natural and LP-Gas. Free to travel. Supervision and/or sales desired. 1970.

Engineer—experienced in gas distribution and in gas and electric property accounting. Desires administrative, managerial, or supervisory position. Age 39. 1971.

Engineering Administrator—graduate mechanical engineer with 25 years of experience in heating, air conditioning, and water heating fields. Member of numerous general industry committees. Background includes sales, research, and general management responsibilities. Executive management training course. Detailed resume and references on request. Married. Will relocate. 1972.

Management Engineer—13 years' experience in all phases of gas utility operations, both manufactured and natural gas, including sales promotion. Past four years as management consultant to group of companies. Desires position in middlewest with minimum travel requirements. 1973.

Industrial Sales Engineer—graduate engineer with eight years' experience with established natural gas utility company in commercial and industrial gas sales. Thoroughly familiar with commercial and industrial applications including process heating, boiler conversions, and gas air conditioning. Married, responsible, age 32. Complete resume upon request. 1974.

Engineering Administrator—gas engineer with 20 years experience in natural gas distribution and transmission. Familiar with measurement, regulation, instrumentation, leakage control, standard procedures, personnel training, electronic data processing. Very inter-

ested in cost reduction through automation and the elimination of unnecessary and/or duplicate procedures. Registered in California and Utah as a professional engineer. Detailed resume and references sent upon request. 1975.

Industrial Sales Engineer—background includes industrial sales engineering, residential and commercial heating, water heating, domestic appliances and general management responsibilities. Thorough knowledge of sales procedure in both large and small utility companies, natural, manufactured and LP-Gases. Detailed resume on request. 1976.

POSITIONS OPEN

Industrial Gas Salesman—aggressive natural gas utility (Eastern Pennsylvania) requires services of man with experience to call on customers to promote gas sales for industrial and commercial applications. Fringe benefits available. Salary open. 0920.

Development Engineer—manufacturer of gas, oil and electric space heating equipment needs man to assist development and laboratory work to consist of design, testing, model building, etc. Mechanical engineering background preferred. A. G. A. Laboratories training helpful. Send resume or call Personnel Manager, Coolerator Division, McGraw-Edison Co., 704 N. Clark St., Albion, Mich. 0921.

Rate Engineer—prominent consulting company, New York City, has opening for graduate engineer with five years or more utility rate experience. Must be able to analyze, design and administer rate structures, and analyze costs of service and competitive rate schedules. Ability to write effective reports, and experience in dealing with governmental regulatory agencies desirable. Send confidential resume and salary requirements. 0922.

Gas Engineer—New natural gas distribution utility (Miami) with 15,000 customers needs young

engineer, experienced in distribution system operation and design, and capable of generating new ideas and techniques suitable for use in rapidly growing area. Right man can build engineering department for company. Please send resume of education, experience and salary. 0923.

Gas Engineer or Rate Engineer—excellent opportunity to work with Vice President of medium-sized gas utilities consulting engineering firm (NYC) which is expanding steadily. Must be adaptable to learn all phases of gas utility business including distribution system and pipeline design, supervision of construction, rate making, special operating problems, economics, finance, etc. Must have from three to eight years' operating experience with gas utility, or equivalent experience in consulting engineering. Pension and profit sharing plans. Send resume and salary requirements. 0924.

Depreciation Engineer—graduate engineer, experience in the gas or electric utility field, ability to apply generally accepted theories and methods for determining depreciation rates and reserves, is being sought by a major engineering-consulting firm. Under rules of taxation applicable to electric and gas utilities, will be responsible for: determining depreciation allowances based on estimated useful lives and salvage; developing and applying mortality curves to mass property accounts as a statistical means of identification of property; developing statistical studies to measure reasonableness of reserves for depreciation. 0925.

Gas Measurement Specialist—company has been producing equipment to measure gas since early 1900's. Mechanical Engineering degree or its equivalent necessary. Salary between \$7,200 and \$9,000 per year plus sales bonus. Basic requirements plus two to four years experience in the gas measurement field (industrial or utility) in an engineering or sales capacity concerned with industrial usage. After brief training period—field assignment as a meter field sales engineer. 0926.

Pacific Gas and Electric elects Bonner, Fisher vice-presidents; Dreyer retires



E. Howard Fisher

JOHN F. BONNER has been elected vice-president of Pacific Gas and Electric Co. in charge of engineering. He succeeds Walter Dreyer, who has retired after 43 years. In addition, E. Howard Fisher has been elected vice-president in charge of gas operations.

Mr. Dreyer will be retained by the company as a consultant on pending major projects.

Mr. Bonner became assistant to Mr. Dreyer in 1955. A civil engineer, he joined the company in 1937 as an assistant hydrographer. During his career with Pacific Gas and Elec-

tric, he has been closely concerned with hydroelectric developments on the major watersheds of northern and central California.

Mr. Bonner is a member of the American Society of Civil Engineers.

Mr. Dreyer began summertime employment with the company in 1912 while he was a student at the University of California. Upon his graduation in 1916 he became a designer in the company's civil engineering division. He subsequently was in charge of design and, in 1929, he became assistant chief of the civil engineering division. He became chief in 1944 and was elected vice-president and chief engineer in 1952.

Mr. Dreyer is a member of the American Society of Civil Engineers, the United States committee on large dams of the World Power Conference, and the United States na-

tional committee of the International Conference on large electric high-tension systems. He has also served as a consultant to the National Security Resources Board and the Defense Electric Power Administration.

Mr. Fisher became general superintendent of pipeline operations in 1954. He succeeds Philip E. Beckman, who died on Nov. 21.

In 1930 Mr. Fisher joined the Pacific Public Service group of companies as an electrical engineering assistant with Coast Counties Gas and Electric Co. From 1939 to 1954 he was manager and a director of Coast Industrial Gas Co., Coast Natural Gas Co., Natural Gas Corp. of California, and Gas Lines, Inc. He was named manager of the pipeline department of Pacific Public Service Co. in 1944 and manager of gas supply and control of Coast Counties Gas and Electric in 1951.

H. C. Price, Jr., becomes president of Price Co.; H. C. Price, Sr., advances to chairman

H. C. PRICE CO. has elected Harold C. Price, Jr., president. He succeeds Harold C. Price, Sr., who became chairman of the board. In addition, R. K. Shivel was elected vice-president.

The younger Mr. Price began his career with the firm in 1950 as timekeeper on a pipeline spread. In 1951 he became admin-

istrative manager of the pipeline department. He was named vice-president in 1955 and executive vice-president in 1958.

Mr. Shivel joined the company in 1928 as a welder. He subsequently participated in pipeline projects for the firm throughout the United States, South America, Canada, and Alaska, and in 1939 he became welding

foreman. In 1942 Mr. Shivel worked as pipeline superintendent on the Canol project in Alaska for Bechtel-Price-Callahan. He next was field superintendent on the California "Biggest Inch" pipeline project, which was completed in 1947. He became general superintendent of the company's pipeline division in 1951.

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